Norton Utilities™ for Macintosh User's Guide

Norton Utilities 6.0™
For Macintosh

Norton Utilities™ for Macintosh User's Guide

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CHAPTER 1

Installing Norton Utilities

Welcome to Norton Utilities for Macintosh

Norton Utilities helps you optimize performance and solve problems easily. This collection of software tools helps you repair and optimize disks, recover lost data, and prevent future problems.

If you have an emergency

If you purchased Norton Utilities because your computer won't boot, you see a disk or folder with a blinking "?," files have "disappeared," or you wish to recover data, DO NOT INSTALL Norton Utilities yet! Please refer to Chapter 2, "Emergency data recovery and troubleshooting" on page 21.

If you purchased Norton Utilities to maintain your Macintosh and do not currently have a problem, refer to Chapter 4, "Enhancing performance and security" on page 71.

If you currently have an emergency, be aware of these cautions:

- Do not install Norton Utilities for Macintosh on a disk that you want to repair or recover data from. ANY new information saved to your disk might destroy the files you are trying to recover.
- Do not initialize your disk!

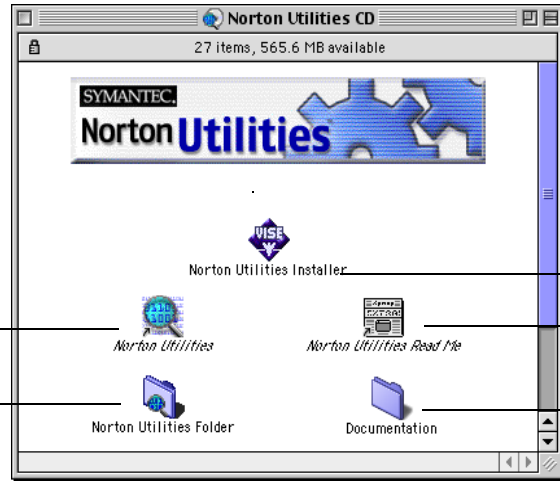
  If booting from a CD results in a "Do You Want To Initialize?" dialog box message, click No or Cancel. There is a good chance the disk can be repaired or the data can be recovered using Norton Utilities.

This *Norton Utilities for Macintosh User's Guide* provides just enough information to get you started. For full, detailed information, open the *Norton Utilities for Macintosh Reference Guide* PDF file in the

Documentation folder on the CD. For more information, see "Accessing the Reference Guide PDF" on page 16.

About your Norton Utilities for Macintosh CD

Use your Norton Utilities for Macintosh CD to install your software. The CD also contains Mac OS System software that lets you reboot when you need to repair problems on your usual startup disk.



In addition to the Norton Utilities for Macintosh Installer, the Norton Utilities for Macintosh application icon, and a folder containing program files, several other items are also included on the CD. Other items include:

- Read Me: Contains late breaking information, troubleshooting tips, installation instructions, and the default location of all files installed by Norton Utilities.
- Documentation folder: Contains a Reference Guide in PDF format and installation files for Adobe Acrobat Reader.
- System folder: Lets you restart your computer from the CD to run Norton Utilities for Macintosh before you install it, or any time you need to scan or perform repair, recovery, or optimization on the disk containing your active System folder.
- SimpleText application: Lets you read the Read Me file.
- Norton Tools folder: Contains the tools that make up Norton Utilities, including Norton Disk Doctor, Speed Disk, and UnErase. Also located

in the Norton Tools folder is the Tech Support Tools folder, which contains special tools for use by Symantec Technical Support.

Installing Norton Utilities for Macintosh

We strongly recommend running Norton Disk Doctor before installing. When you are sure your Startup Disk is healthy, use the following steps to install Norton Utilities.

For late-breaking information and installation troubleshooting tips, see the Read Me file on the CD. Insert the CD into your CD-ROM drive and double-click the Read Me file.

Starting from the CD

If you suspect that your hard drive is damaged (you can't restart with it), you can use the Norton Utilities for Macintosh CD as your startup disk. For more information, see "Emergency data recovery and troubleshooting" on page 21. If your startup disk is *not* damaged, you can continue to install.

To start your computer from the Norton Utilities for Macintosh CD:

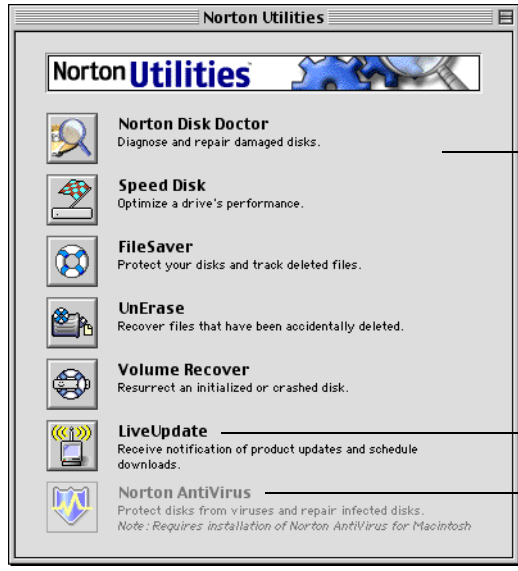
1. Insert your Norton Utilities for Macintosh CD into the CD-ROM drive.
2. Restart your computer from the Norton Utilities for Macintosh CD by using one of the following methods:
   - On the Special menu, click Restart, while pressing the C key on the keyboard.
   - On a Macintosh computer with a third-party or external CD-ROM drive, go to Control Panels, click Startup Disk, and select the Norton Utilities for Macintosh CD as your Startup Disk. Close the Startup Disk control panel. On the Special menu, click Restart.

     You can tell that your computer has restarted from the CD because the Norton Utilities for Macintosh pattern appears in the background of the Desktop.
   - If the CD window doesn't open automatically, double-click the CD icon to open it.

To scan your hard drive:

1 In the CD window, double-click the Norton Utilities icon.

2 In the Norton Utilities main window, click Norton Disk Doctor.

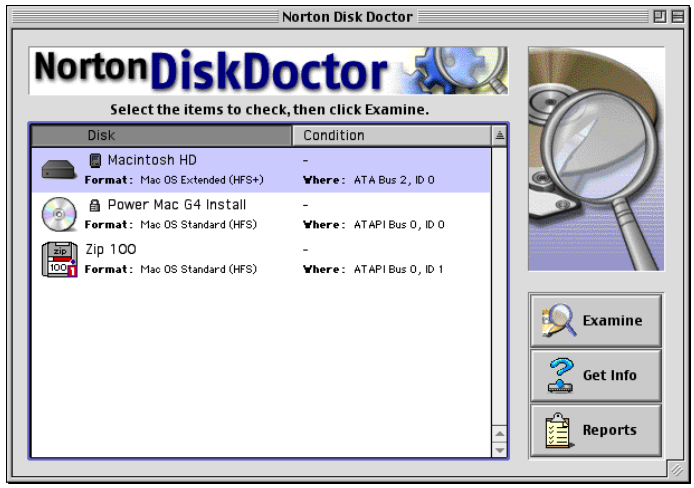

Norton Utilities
Norton Utilities
Norton Disk Doctor
Diagnose and repair damaged disks.
Speed Disk
Optimize a drive's performance.
FileSaver
Protect your disks and track deleted files.
UnErase
Recover files that have been accidentally deleted.
Volume Recover
Resurrect an initialized or crashed disk.
LiveUpdate
Receive notification of product updates and schedule downloads.
Norton AntiVirus
Protect disks from viruses and repair infected disks.
Note: Requires installation of Norton AntiVirus for Macintosh

Run a utility, or choose a tool from the Utilities menu

Get the latest program updates

If Norton AntiVirus for Macintosh is installed, start it from here

3 In the Norton Disk Doctor window, select a drive and click Examine.



4 If a drive doesn't appear in the Norton Disk Doctor window, it might be damaged. Choose Show Missing Disks from the Disks menu. For more information, see "Locating missing disks" on page 69.

5 Norton Disk Doctor displays a summary of problems found, if any. If a problem is found, see "If an error is found" on page 27.

6 Click Done to close the Summary window.

7 On the File menu, click Quit or press Command-Q to close the window.

To install Norton Utilities for Macintosh:

1 Insert the Norton Utilities for Macintosh CD into the CD-ROM drive.

If the CD window doesn't open automatically, double-click the CD icon to open it.

2 In the CD window, double-click Norton Utilities Installer.

3 Follow the prompts to progress through the information screens. If you click Disagree on the License and Warranty Agreement, the installation is cancelled.

4 Do one of the following:

- For a full installation, click Easy Install.
- To select individual components, click Custom Install, and select the components to install.

5 Confirm or specify a destination folder to which to install.

6 Follow the on-screen instructions to complete the installation, and then click Restart.

If you used the Startup Disk Control Panel settings to start your computer from the Norton Utilities for Macintosh CD, restore the old settings before you restart.

To restore your computer's settings:

1 Go to Control Panels.

2 Click Startup Disk.

3 Click your hard disk to make it the startup disk.

4 Close the Control Panel.

5 On the Special menu, click Restart.

After you restart, if you have trouble ejecting the CD, try one of the following:

- Press the CD-ROM drive's eject button when your Macintosh restart chime sounds.
- On newer Macintosh computers with a slot-loading CD-ROM drive, press the mouse button while starting up to eject the CD.

If you can't start from the Norton Utilities for Macintosh CD

The System software included on the Norton Utilities for Macintosh CD might not be sufficient to start newer Macintosh models issued after the release of this version of Norton Utilities for Macintosh. To find out if a newer CD is available, contact Symantec Customer Service. For more information, see "Service and support solutions" on page 103.

Some third-party CD drives cannot start a computer from a CD. As an alternative to the CD, set up another hard drive, a partition on a hard drive, or a removable disk such as a Zip or SuperDisk drive as a startup disk.

To set up another drive as a startup disk:

1 Install your Macintosh OS System software to the designated drive.

2 Install Norton Utilities for Macintosh on the new startup disk.

3 Restart your computer from the new startup disk to run Norton Utilities in an emergency.

4 Use the Startup Disk Control Panel to set it as the startup drive by doing the following:

a On a Macintosh computer with a third-party or external CD-ROM drive, go to Control Panels.

b Click Startup Disk.

c Select the Norton Utilities for Macintosh CD as your Startup Disk.

d Close the Startup Disk Control Panel and click Restart on the Special menu. Your computer will start up from the designated volume.

Now you can install Norton Utilities.

General troubleshooting suggestions

Try these tips when you start having problems with your system:

- Check all cables for loose connections.
- Disconnect all external devices.
- Reset the PRAM by restarting while pressing Command-Option-P-R. Hold for four chimes, then release.
- Update your device drivers with the latest formatting software. For more information on updating drivers, consult the device manufacturer's documentation.

For more information

Context-sensitive help is built in to the Norton Utilities for Macintosh application. The *Norton Utilities for Macintosh Reference Guide* PDF file also contains information about Norton Utilities for Macintosh.

Norton Utilities for Macintosh Guide help files contain information about how to use Norton Utilities features.

To access Help:

- Click the Guide on the Help menu in any window in Norton Utilities.

Norton Utilities Balloon Help contains explanations of items on the screen.

To turn on Balloon Help:

- On the Help Menu, click Show Balloons; point to any item to see a description.

The *Norton Utilities for Macintosh Reference Guide* is available in printable Adobe Acrobat PDF format on the CD. An Adobe Acrobat Reader can also be installed if it is not already on your computer.

Note: The Read Me file on the Norton Utilities for Macintosh CD contains information that was unavailable at the time this guide was published. Read this information before you go any further.

Accessing context-sensitive help

Norton Utilities for Macintosh Help is an interactive guide that walks you through unfamiliar tasks.

Norton Utilities for Macintosh Help and Shortcuts include:

- Step-by-step guidelines to Norton Utilities for Macintosh procedures
- Definitions of terms related to Norton Utilities for Macintosh and your computer
- Tips and shortcuts to make Norton Utilities for Macintosh applications faster and easier to use

To open Norton Utilities for Macintosh Help:

1. Start Norton Utilities for Macintosh.
2. On the Help menu, click Norton Utilities for Macintosh Help.
3. Click a help book on the left and a topic on the right.
4. Click OK.

To turn on Balloon Help:

- On the Help menu, click Show Balloons.

Accessing the Reference Guide PDF

You must have Adobe Acrobat Reader installed to read the product Reference Guide PDF. If you do not have it installed, install it from the Norton Utilities for Macintosh CD.

You cannot view the Reference Guide PDF if you started your computer from the CD, because Acrobat Reader will not run when you have started from a locked device. To have this documentation available while started

from the CD, print it while started normally from the hard drive or from another computer.

To install Adobe Acrobat Reader:

1. In the Norton Utilities for Macintosh CD window, double-click the Documentation folder.
2. Double-click the Adobe Acrobat Reader installer icon.
3. Follow the prompts to select a folder for Adobe Acrobat Reader and complete the installation.

To open the Reference Guide PDF:

1. In the Norton Utilities for Macintosh CD window, double-click the Documentation folder.
2. Double-click Reference Guide.

   You can also drag the Reference Guide to your hard disk. It needs approximately 5 MB of disk space.

Registering Norton Utilities for Macintosh

Using your existing Internet connection, you can register Norton Utilities for Macintosh via the Internet.

If you are running Macintosh OS 8.5 or higher, an icon in the Norton Utilities for Macintosh folder lets your launch your browser and connect to Symantec's software registration page. If you are running a lower version of Mac OS, point your browser to the Symantec Web page.

To register via the Internet:

1. Connect to the Internet.

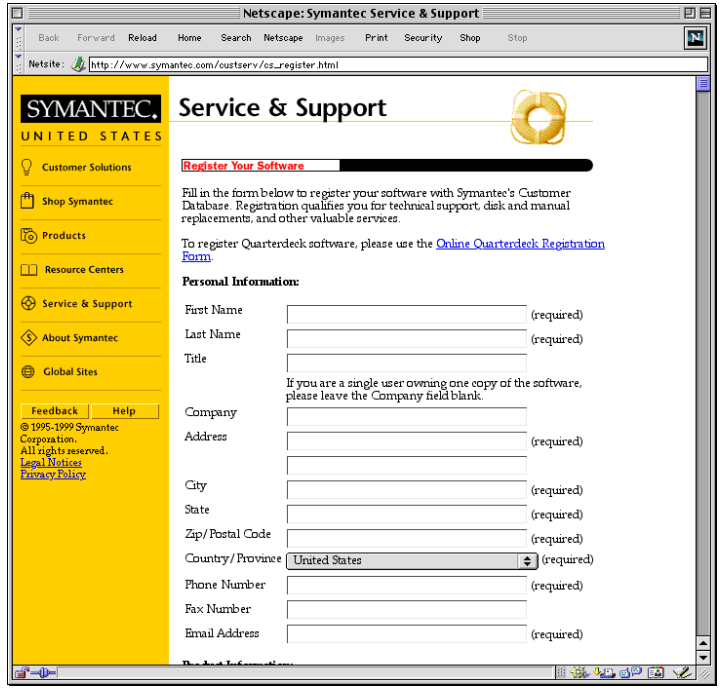
   If you use America Online (AOL) to connect to the Internet, see "Connecting to the Symantec Web site through America Online" on page 19.
2. In the Norton Utilities for Macintosh folder, double-click Register Your Software.

Your default Internet browser should go to the Symantec Service & Support registration page.

If you are using Macintosh OS 8.1, start your browser and navigate to the Symantec Service & Support page:

www.symantec.com/custserv/cs_register.html

3 On the Service & Support page, type all of the required information.


Netscape: Symantec Service & Support
Back Forward Reload Home Search Netscape Images Print Security Shop Stop
Netsite: http://www.symantec.com/custserv/cs_register.html
SYMANTEC.
UNITED STATES
Customer Solutions
Shop Symantec
Products
Resource Centers
Service & Support
About Symantec
Global Sites
Feedback Help
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Service & Support
Register Your Software
Fill in the form below to register your software with Symantec's Customer Database. Registration qualifies you for technical support, disk and manual replacements, and other valuable services.
To register Quarterdeck software, please use the Online Quarterdeck Registration Form.
Personal Information:
First Name (required)
Last Name (required)
Title
If you are a single user owning one copy of the software, please leave the Company field blank.
Company
Address (required)
City (required)
State (required)
Zip/Postal Code (required)
Country/Province United States (required)
Phone Number (required)
Fax Number
Email Address (required)

4 Click Submit Registration.

Reading Late Breaking News

Norton Utilities for Macintosh installs a Late Breaking News link. This link lets you see the latest information available for your installed software.

To read Late Breaking News:

1 Connect to the Internet in your usual way.

If you use America Online (AOL) to connect to the Internet, see "Connecting to the Symantec Web site through America Online" on page 19.

2 In the Norton Utilities for Macintosh folder, double-click Late Breaking News.

Your default Internet browser should go to the Symantec Late Breaking News Web page for your product.

3 If you are using Macintosh OS 8.1, start your browser and navigate to the Symantec Web page:

www.symantec.com/product/home-mac.html

Connecting to the Symantec Web site through America Online

If you use America Online (AOL) as your Internet Service Provider (ISP), you must connect to AOL before you go to the Symantec Registration Web site.

Use this procedure if your Internet Control Panel has its Default Web Browser set to America Online.

To register your software via AOL:

1 Log on to AOL.

2 On the AOL Welcome page, click the AOL Internet browser.

3 Move the AOL browser and any other open AOL windows out of the way.

4 In the Norton Utilities window, double-click Register Your Software.

5 Follow the procedure from "Registering Norton Utilities for Macintosh" on page 17 to enter registration information.

6 Click Submit Registration.

7 Disconnect from AOL.

CHAPTER 2

Emergency data recovery and troubleshooting

The following pages contain step-by-step procedures for repairing damaged disks and recovering lost or corrupted data in emergency situations. They summarize how to use essential Norton Utilities tools to recover files and disks. More detailed information about all the Norton Utilities tools is in the *Norton Utilities for Macintosh Reference Guide* PDF file as well as in the online help.

Norton Disk Doctor, Volume Recover, and UnErase are the Norton Utilities tools used for disk repair and file recovery:

- Use Norton Disk Doctor to repair disk damage. For more information, see "Starting and running Norton Utilities from the CD" on page 22, and "Using Norton Disk Doctor" on page 49.
- If you need to restore your disk's directory, have unintentionally initialized your hard disk and want to restore the data, or if your disk is beyond repair, run Volume Recover. For more information, see "Recovering FileSaver data with Volume Recover" on page 70.
- UnErase recovers files from the damaged disk and copies them to an undamaged disk. For information on using UnErase for emergency data recovery, see "Recovering files with UnErase" on page 28.
- If these tools are unable to help immediately, read "More troubleshooting procedures" on page 42 for more suggestions on how to restore your disks or recover data.

Starting and running Norton Utilities from the CD

Use the Norton Utilities for Macintosh CD as a startup disk for troubleshooting purposes, as well as for installing Norton Utilities on your computer. Using the CD as a startup disk lets you access your computer without using your hard drive, so you can make certain types of repairs with Norton Disk Doctor.

To start up from the Norton Utilities for Macintosh CD:

1. Insert your Norton Utilities for Macintosh CD into the CD-ROM drive.
2. To start up from your Norton Utilities CD by using one of the following methods:
   - On the Special menu, click Restart while holding down the "C" key on the keyboard. If your computer is turned off, start up while holding down the "C" key on the keyboard.
   - On a Macintosh with a third-party or external CD-ROM drive, go to Control Panels, click Startup Disk, select the Norton Utilities for Macintosh CD as your Startup Disk, and then click Restart on the Special menu.

   You can tell that your computer has restarted from the CD because the program desktop pattern appears in the background.
3. If the CD window is closed, double-click the CD icon to open the CD window.

4 In the CD window, double-click the Norton Utilities icon.

Norton Utilities
Norton Utilities
Norton Disk Doctor
Diagnose and repair damaged disks.
Speed Disk
Optimize a drive's performance.
FileSaver
Protect your disks and track deleted files.
UnErase
Recover files that have been accidentally deleted.
Volume Recover
Resurrect an initialized or crashed disk.
LiveUpdate
Receive notification of product updates and schedule downloads.
Norton AntiVirus
Protect disks from viruses and repair infected disks.
Note: Requires installation of Norton AntiVirus for Macintosh

5 From the Norton Utilities main window you can:

- Run Norton Disk Doctor. See "Repairing damaged disks" below.
- UnErase recently erased files. See "Recovering files with UnErase" on page 28.
- Run Volume Recover to restore an entire disk. See "Using Volume Recover to restore FileSaver information" on page 31.

Repairing damaged disks

If you have a damaged or crashed disk, start up or restart from the CD and run Norton Disk Doctor. See "Starting and running Norton Utilities from the CD" on page 22.

Note: When booted from the CD, Norton Disk Doctor can repair damage to disks formatted under most Mac OS versions. For more details, please see the Read Me file.

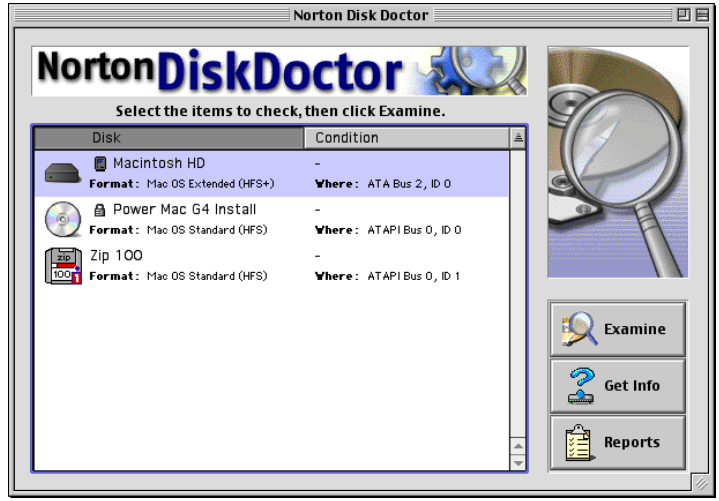
The type of damage determines how much data is recoverable. However, if the disk was protected by FileSaver, chances are good that the disk can be repaired or recovered quickly and easily.

Norton Disk Doctor checks your disk for damage and asks you for permission before repairing any damage. Depending on the type of damage, Norton Disk Doctor might tell you to run Volume Recover or UnErase. In these cases, you can start the programs directly from Norton Disk Doctor.

Tip: If you only want to diagnose the disk or if you want to disable specific tests, you can do so from the Norton Disk Doctor Preferences dialog box. For more information, choose Show Balloons from the Help menu and display the balloon help in the Preferences dialog box, or see the *Norton Utilities Reference Guide* PDF on the Norton Utilities for Macintosh CD.

To run Norton Disk Doctor:

1. In the Norton Utilities main window, click the Norton Disk Doctor button.
2. In the Norton Disk Doctor main window, select the damaged disk.



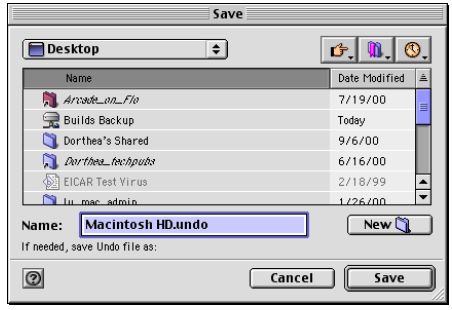
If the damaged disk is a floppy disk or other type of removable disk, insert it now.

If you do not see the disk you want to diagnose, choose Show Missing Disks from the Disks menu. If the disk still does not appear, see "Locating missing disks" on page 69.

Note: When inserting removable media, if the removable disk is damaged severely and the Finder is active, the Finder might try to display an alert message. Your Macintosh will beep and display a Macintosh icon on the right side of the menu bar. Make sure that Norton Disk Doctor is the active application in the Application menu. Do not select the Finder.

3 Click Examine.

Norton Disk Doctor prompts you to choose a location for Undo files.



4 Navigate to the folder to which you want to save the NDD Undo file, and click Save.

If your hard drive is damaged, do not select it as a location for Undo files. If the dialog box shows no option for saving Undo files other than your damaged drive, or the Norton Utilities CD, click Cancel. Norton Utilities will continue to examine and repair your disk without creating an Undo file for the fixes.

Norton Disk Doctor examines the selected disk.

The progress bar indicates when each test is completed.

When Norton Disk Doctor encounters an error, it displays an alert dialog box. See "If an error is found" on page 27. Read the description of the problem and follow the recommendation.

5 To skip any test, click Skip. If you have selected more than one disk to test, you can also click Skip Disk.

When Norton Disk Doctor is finished, it displays the results for each disk tested in a report window.

6 Click Done to return to the Norton Disk Doctor window.

7 Quit Norton Disk Doctor and examine your disk to see if the data on your disk appears to be correct.

If Norton Disk Doctor found and repaired major problems, run it again to be sure that all problems have been fixed. When finished, Norton Disk Doctor should report "No Problems Found."

If an error is found

If the error looks like it can be fixed, Norton Disk Doctor lets you decide whether to fix it.

Problem
There is a problem on:
Macintosh HD
Problem:
Minor errors were found in the files listed below.
The files have bad modification dates.
(15,2,6)
Recommend: Norton Utilities recommends that you fix this problem. However, this fix cannot be undone.
2 files:
Macintosh HD:Desktop Folder:Dorthea's Shared:Norton SystemWorks UG.pdf
Macintosh HD:Desktop Folder:Dorthea's Shared:NUM User's Guide.pdf
Stop
Fix All
Continue
Fix
Click for a detailed description of the problem
Description of the problem
Recommended course of action
Files affected by the problem

To respond to a repair alert message:

1 Do one of the following:

- Click Fix to repair the error for the first selected file.
- Click Fix All to repair errors in all the listed files.
- Click Continue to skip the repair and continue diagnosing the disk.
- Click Alias or Alias All to create aliases for files that Norton Disk Doctor can't repair immediately.
- Click Stop to end the session.

If Norton Disk Doctor cannot fix the error, it informs you of the problem and makes a recommendation.

2 Click View Reports to see which files were fixed. For more information, see "Using Norton Disk Doctor" on page 49.

If Norton Disk Doctor can't fix a problem

If the error cannot be fixed, Norton Disk Doctor provides other options. For more information, see Chapter 3, "Repairing and recovering disks, files, and data" on page 47.

Recovering files with UnErase

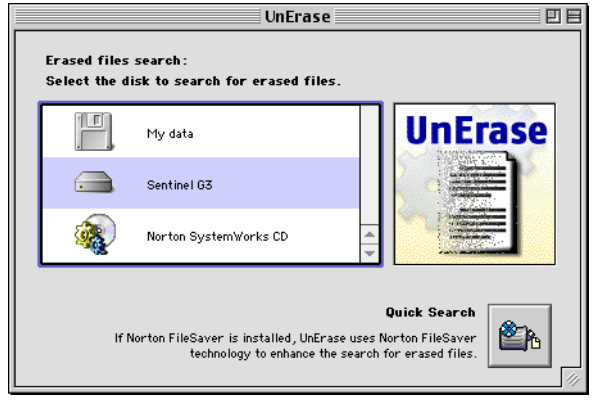
If you have accidentally deleted files, or files are missing, try using UnErase. Although UnErase has powerful data-recovery capabilities, basic operation is simple and almost completely automatic.

Warning: Although you can recover an erased file to the same disk, it is safer if you specify a removable disk or another hard disk, if you have one. When you recover to the same disk, you jeopardize your chances of recovering other erased files. If you choose to recover to a floppy disk and the file is too big, UnErase splits the file across as many disks as needed. See "Rejoining file segments" on page 68 for directions to rejoin a file that has been split.

To UnErase files:

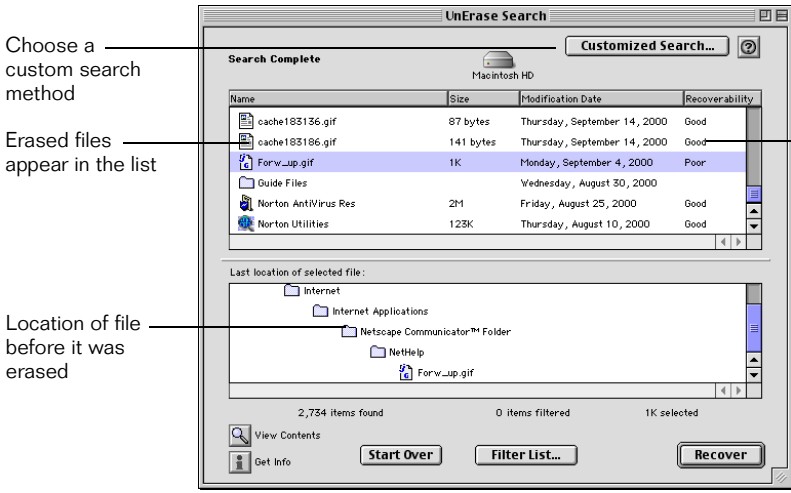
1 In the Norton Utilities main window, click UnErase.

2 Select the drive to search for lost files.


UnErase
Erased files search:
Select the disk to search for erased files.
My data
Sentinel G3
Norton SystemWorks CD
UnErase
Quick Search
If Norton FileSaver is installed, UnErase uses Norton FileSaver technology to enhance the search for erased files.

3 Click Quick Search.

UnErase searches the selected disk for erased files and displays the results in the UnErase Search window, with an estimate of each file's recoverability.



The following are other ways to view erased files:

- Click a column title—Name, Size, Modification Date, or Recoverability—to sort the UnErase window listing.
- Select a file in the UnErase window and click View Contents to view the contents of a file.
- Select a file in the UnErase window and click Get Info to get information about an erased file.

If the files are not found, you can perform a more customized search. For information about this and other UnErase search-and-rescue techniques, see "Performing customized searches" on page 60.

4 Select an erased file and click Recover.

The Recovery Destination dialog box appears with a confirmation of the files to be recovered and the disk to which you are recovering.

Files are recovered to a Recovered Files folder on your hard disk.

Chances of recovering data are much stronger when FileSaver is actively protecting your computer. For more information, see "About Norton FileSaver" on page 47.

Use Speed Disk regularly to reduce file fragmentation and improve your chances of recovering your files in case of catastrophic directory damage. Unfragmented files have a greater chance for recovery. See "Optimizing

disks, files, and free space with Speed Disk" on page 71 for more information on defragmenting files.

If an erased file is not found

Depending upon the situation, UnErase uses several methods to search for erased files or lost data. If you do not have success with the first method UnErase uses, select a customized search.

To specify a custom UnErase search method:

1. With the UnErase main window open, click Customized Search on the Tools menu.
2. Select a search method:
   - Catalog Search

     Searches the disk directory for valid file records. Use this option when you are trying to recover files missing because a disk is damaged. The Catalog Search for erased file is included as part of UnErase's default Quick Search, so you will not find additional erased files with this option.

     Do not select Search Entire Disk For Parts Of The Catalog Tree unless you have already tried the Catalog Search without this option selected, and you have not found your files. Selecting this option will slow down the search significantly.

   - File Type Search

     Searches the disk for files that match the selected file types.

     a. If an application's file type doesn't show up on the list, you can click Create File Type to specify an application, and create a template to use for searching. For more information, see "Creating File Type templates" on page 64.

     A File Type Search is most useful when a Quick Search for erased files has not been successful, or when a disk's directory structures are too badly damaged for the Catalog Search to find the desired files.

     b. Select Search For Resource Forks to have UnErase search for all resource forks on the drive, in addition to the selected file types. When this box is not selected, UnErase finds only the resource forks belonging to the selected File Types.

Searching for Resource Forks is particularly useful for recovering fonts, as well as many types of Preferences files that can't be found as specific file types.

- Text Search

  Lets you search for words or phrases that you know were in a file (not the document's title). Use a Text Search when salvaging word processing files, email, or other text-based data files from a damaged disk, or when you cannot remember the name of the erased file. This search can take a long time. Text Scan is not useful for recovering non-text files.

  a Select Erased or Real files for the search.

  b Enter a word or phrase from the file in the Search Text box.

  UnErase finds all files that contain the search text.

  c Select Case Sensitive to further restrict the search. For example, "Mark" is not a match for "mark" when Case Sensitive is selected.

  d Click Search.

  For full details on creating File Type Templates and other UnErase techniques, see "Performing customized searches" on page 60.

3 On the File menu, click Quit to close UnErase.

Using Volume Recover to restore FileSaver information

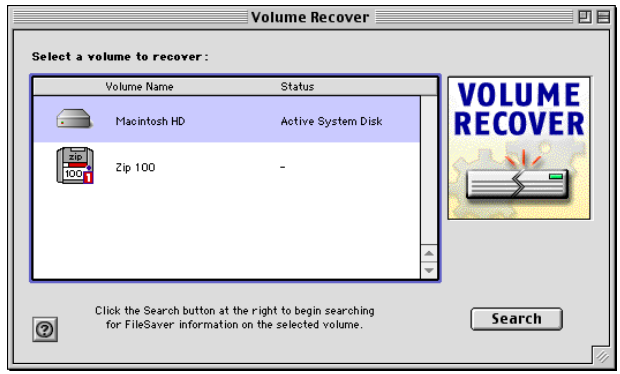
By using Volume Recover to restore critical FileSaver information to a severely damaged disk, you might be able to return the disk to a condition that Norton Disk Doctor can repair.

Normally, you need to use Volume Recover only on the recommendation of Norton Disk Doctor. However, when you initialize a hard disk, you can use Volume Recover directly or use Volume Recover to rebuild the entire volume. For more information, see "Rebuilding directories" on page 33.

To use Volume Recover:

1 In the Norton Utilities main window, click Volume Recover.

You can also choose Volume Recover from the Norton Disk Doctor Utilities menu.



Select the disk to recover. Volume Recover will not recover your startup disk or locked disks. If you select one of these disks, the Search button is disabled.

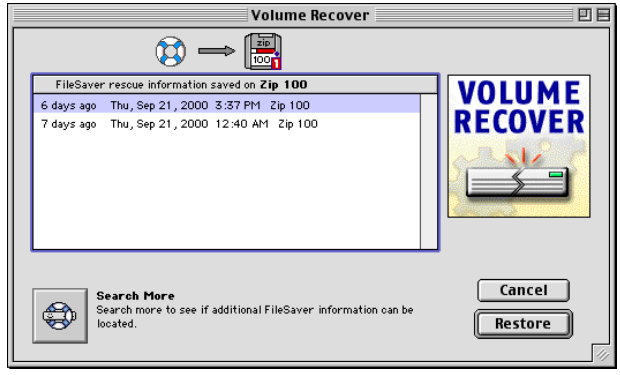
If the damaged disk is a floppy disk or other type of removable disk, insert it and select it in the list.

If you do not see the disk you want to select, on the Tools menu, click Show Missing Disks.

If the disk still does not appear, see "Locating missing disks" on page 69.

2 Click Search.

Volume Recover lists the FileSaver information files it finds.


Volume Recover
FileSaver rescue information saved on Zip 100
6 days ago Thu, Sep 21, 2000 3:37 PM Zip 100
7 days ago Thu, Sep 21, 2000 12:40 AM Zip 100
VOLUME RECOVER
Search More
Search more to see if additional FileSaver information can be located.
Cancel
Restore

3 If the located FileSaver rescue information is for the volume you want to recover, select the most recent FileSaver rescue information file.

- Click Search More if the located FileSaver information is not for the volume you want to recover, or if you think that there is more recent FileSaver information for the volume.
- Click Search Entire Disk to have Volume Recover search the entire physical device.
- If no FileSaver information is found, you can rebuild the directories.
- Always select the most recent file, unless you know that your disk was damaged before that date and time. In that case, you should use the older file.

Warning: If you must use an older FileSaver file to recover data, you will be restoring your disk to the way it was on the date the FileSaver data was saved. You will lose any changes to files created or modified after the date of that FileSaver file.

---

4 Click Restore to begin copying the FileSaver data to your disk.

Volume Recover displays a message reminding you that the directory information will be replaced by the FileSaver information.

5 Click Yes to copy the information to the disk.

After Volume Recover is finished, it indicates if the restoration of FileSaver data was successful.

6 Because Volume Recover rewrites the driver area of the hard drive, you must restart the computer following the recovery.

7 If the procedure worked, copy any critical files from the restored disk to another disk in case the hard disk is damaged again.

8 Run Norton Disk Doctor to repair the disk with the newly restored directory and partition information.

Rebuilding directories

Sometimes missing files are not listed in a disk's directory because damage to the directory prevents the corresponding directory entries from being found. If your directory is damaged, you can use the Rebuild Directories feature in Volume Recover to rebuild it. Rebuild Directories scans the hard disk for all file records, and creates a directory containing those records.

Volume Recover will recover all available entries using this feature. This might include files that you have intentionally deleted.

Warning: Use Rebuild Directories with caution. This feature cannot be undone.

To rebuild a disk's directory, you must restart from the Norton Utilities for Macintosh CD, or from another startup disk. For more information, see "Starting and running Norton Utilities from the CD" on page 22.

To rebuild a directory:

1 Start Volume Recover.

2 On the Disks menu, click Rebuild Directories.

Volume Recover scans the selected disk and displays an estimate of the number of directory items found, and the amount of space they occupy.

Rebuild Directories
Volume Recover has found 23 files occupying 1.1 MB.
If you expected to find more files, click Search Entire Disk.
Cancel
Search Entire Disk
Rebuild Directory

Your options are:

- Rebuild Directory: Proceeds to rebuild the directory with the discovered files.
- Search Entire Disk: Do not click this button unless damage to your disk is so severe that no other method can recover your missing files.

  When you click this button, Volume Recover scans the entire disk for all files. The additional files found by this scan might result in loss of valid files in the directory.

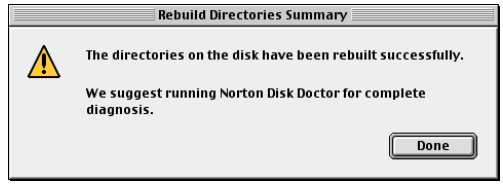
3 If the estimate is satisfactory, click Rebuild Directory.

Volume Recover
Rebuilding directories cannot be undone and might cause some previously deleted files to reappear.
Are you sure you want to proceed?
Cancel
Proceed

If your disk is badly damaged, Rebuild Directories might need to search the entire disk to ensure that all directory data is safely accounted for. This search can be time consuming. For example, a 4 GB drive might take ten minutes to rebuild.

4 When asked to confirm the warning message, click Proceed.

Volume Recover restores the directory entries.


Rebuild Directories Summary
The directories on the disk have been rebuilt successfully.
We suggest running Norton Disk Doctor for complete diagnosis.
Done

5 Run Norton Disk Doctor to verify that the disk is in good condition. This precaution provides protection in case there are other structural problems on your disk that might still cause you problems.

Troubleshooting

Beyond using Norton Utilities, there are some other basic things you can do to try to fix your Macintosh.

If Disk Doctor and UnErase are unable to solve your problems:

- Check all cables for loose connections. See "Check all cables" on page 37.
- Reset or zap the Parameter RAM—or PRAM—by restarting with the Command-Option-P-R keys held down. See "Zap the PRAM (reset Parameter RAM)" on page 43.
- Disconnect all external devices. See "Have you added anything new lately?" on page 37.
- Update your device drivers with the latest formatting software. For more information on updating drivers, consult the device manufacturer's documentation. For an example, see "Replace a damaged disk driver" on page 42.
- Many peripheral storage devices such as USB and FireWire drives require specific extensions. If you are missing the extension, the device might not function as you expect. If you are trying to examine such a storage device while booted from the Norton Utilities for Macintosh CD, you might not be successful, because the System Folder on the CD does not contain drivers for specific storage devices.

Things you might need

Locate the following items to assist you in the repair of your damaged disk:

- Your Norton Utilities for Macintosh CD.
- The Macintosh OS System CD containing the Utilities folder.
- The application that was used to initialize your hard disk for use on a Macintosh.

  These applications are called device or disk formatting utilities. In most cases, the formatting software will be the Macintosh OS utility, Drive Setup, located on the Macintosh OS CD containing the Utilities folder. If a dealer originally formatted your hard disk and did not give you a copy of the application, you might have to purchase an appropriate formatting utility.

First things first

Before you do anything, try the following suggestions. Many problems start out small and actually become bigger the more they are worked on! Take a few minutes and try the easy things first.

Isolate the problem

Often, problems are easier to find and fix if you can first isolate them from your working equipment.

In other words, if you are using more than one hard disk and only one hard disk has a problem (which is usually the case), reconfigure your computer's peripheral devices so that only the problem drive and your Macintosh are set up for the troubleshooting session. This will not only save time, but also prevent accidents from happening to trouble-free equipment.

Note: Using an Apple keyboard and standard Apple mouse will help eliminate possible problems when you are troubleshooting. Third-party input devices sometimes use custom drivers that are unavailable on the Norton Utilities for Macintosh CD.

All external devices other than the one being examined should be physically disconnected from the computer.

Check all cables

It might be that your Macintosh or the hard disk is not getting power, or that they are not properly communicating with each other due to a faulty cable connection.

To check your cables:

1. With the power switched off, check all cables and connections.

   Make sure that your Macintosh and its peripherals are plugged into a grounded electrical outlet, as well as connected to each other. If the Macintosh is too close to a wall, the cable connectors might be loose or the cables might be crimped and the connection not properly made.

   If you are using a device that has a cable with the same type of connectors on each end, it might make a difference which end is connected to your Macintosh.

   Do not substitute cables for different types of devices even if they look exactly alike. The wiring inside of the cable might be different.

2. If the computer doesn't start, check the power strip or wall outlet with an item that is known to work.

   A lamp or small radio is a convenient tool for checking the power.

3. When you are certain that you have power available and all connections are snug, turn the system back on again.

   If your Macintosh does not even begin to start up, you might have a hardware problem. Continue reading.

Have you added anything new lately?

The two top contenders for taking a startup drive temporarily out of service are adding a new external device and installing software that modifies your system software.

If your problem occurred right after adding a hard disk or other peripheral device, check for device conflicts.

If your problem occurred after adding new software, refer to the software's documentation to see if any programs called system extensions or control panels were installed. These types of programs are designed to enhance your system software, but they sometimes cause conflicts with your system files, other extensions, or with a specific application. If so, you need to check for extension conflicts.

Is it a hardware problem?

Your Macintosh is probably one of the most reliable computer systems manufactured today. It's not unusual for a Macintosh to go five years and even beyond without hardware failure. However, in the unlikely event you do experience such problems, we have provided a list of things that can go wrong that utility software can't fix. If you encounter one of these problems, you most likely will need to see a qualified technician.

Hard disks

If you are having a problem with your hard disk drive that Norton Utilities tools can't fix, you might have a hardware problem. Most internal or external hard disks display telltale symptoms:

- Internal and external drives

  The access or "busy" LED might have suddenly stopped working or might be flashing repeatedly. The sound the hard disk makes when it spins up and recalibrates might have changed or gone away.

  Sometimes drives experience a problem known as *stiction*. This is where the read/write assembly gets stuck to the point that the platter no longer spins. If the drive is external, sometimes a gentle "thump" can free it up long enough for you to perform a backup. This procedure is not entirely recommended nor is it a long term solution, for as soon as you turn off the drive, the problem will return.

- External drives only

  The power LED or the hard disk indicator light doesn't light up.

  This can happen when the hard disk's power supply fails. Your data might be intact on the drive. Have a technician investigate.

- Floppy disk drives and other removable media devices

  Macintosh floppy disk drives can become dirty to the point that they will no longer recognize an inserted floppy disk. If you experience this problem, ask your technician if your drive can be cleaned. Off the shelf drive cleaning kits are not a complete solution to this problem.

  If a floppy happens to get stuck in a drive, take great care in removing it. The read/write head assembly is very delicate and most damage suffered here is not covered under Apple's warranty plan.

  Other removable media drives might require special cleaning procedures. Refer to your manufacturer's instructions.

- Macintosh main logic board

  Some “sad Macintosh” codes (those containing an “F” within the first eight characters) can be rectified using the Norton Utilities for Macintosh or the formatting software for your hard drive. Those that cannot usually indicate that a problem exists with ROM, RAM or elsewhere on the main logic board.

SCSI device conflicts

The Macintosh locates and communicates with SCSI devices, such as hard disks, scanners, and CD-ROM players, by using a SCSI ID number. The SCSI devices are connected to each other, creating a chain through which the Macintosh can communicate with any device. Each device must have a unique ID from 0 to 6. On a Macintosh with built-in SCSI, your Macintosh is always device number 7, the internal hard disk is usually 0, and a factory-installed CD-ROM drive is usually 3. Most external hard disks and other SCSI devices have a switch on the back with which you set the ID number. Depending on the type of SCSI card you have installed in your computer, you can have between 6 and 16 SCSI devices on a single SCSI bus.

To resolve SCSI device ID conflicts:

- Check each SCSI device to make certain that it has a unique ID number from 0 to 6.

  If two numbers are the same, reset one device to an unused number and restart.

  If you have multiple SCSI buses, make sure that no two devices on the same bus have the same ID.

SCSI termination problems

A terminator is a small piece of hardware that fits over the SCSI port, connects to a cable, or is part of the electronics of your SCSI device. If the SCSI chain is terminated improperly, it can hang up your computer and cause startup problems.

If you have more than one SCSI device, you must be terminated twice—at the beginning and at the end of the chain. There can be no more than two terminators in a SCSI chain.

If you have an internal SCSI hard disk, chances are that it is terminated automatically. The user guide that came with the hard disk will normally

contain information on how to change its SCSI ID and how to enable or disable termination.

To resolve a SCSI termination problem:

- Check to see that the first and last device in the SCSI chain are terminated and the others are not.

USB issues

For the most up-to-date solutions, visit the Symantec Service and Support Web site where there are troubleshooting and knowledge base support links:

http://www.symantec.com/techsupp/index.html

Using USB devices as startup disks

Some USB devices cannot be used as bootable volumes on some Macintosh computers. If this is the case for your system, a solution is to install Norton AntiVirus for Macintosh or Norton Utilities for Macintosh onto the USB volume. Include the Norton Shared Lib file in the same folder as the Norton Utilities for Macintosh applications. Start your computer with the USB media inserted and the Macintosh OS CD as the boot volume. Insert the USB media prior to restarting from the Macintosh CD so that the operating system can add the USB volume to the desktop.

Problems starting from USB port

You are attempting to start an iMac DV (slot-loading model) or a Macintosh G4 with a USB port, from the new MacOS 9-based versions of our CDs. During startup, the computer stops responding or the computer crashes with a Bus error. This usually occurs if you have a USB hub, or solitary extra USB device, such as a modem or scanner, connected along with your keyboard and mouse.

Try disconnecting the extra third-party USB device from the computer and start from the CD again.

FireWire device problems

When you start from the Norton Utilities for Macintosh CD your FireWire drive is unrecognized, and you are prompted to initialize or eject it. Because of this, while started from the Norton Utilities for Macintosh CD, you cannot examine any LaCie USB drives or FireWire drives.

The solution is to start from the hard drive and use the installed version of Norton Utilities for Macintosh on the internal drive to examine the external devices.

Extension conflicts

An extension is computer code that, upon startup, alters the way your system software works. (This can include some control panels.) These programs are stored in the Extensions folder or the Control Panels folder in the System Folder.

An extension can cause a conflict with your system files, other extensions, or with a specific application. For example, you might observe that certain functions such as connecting to the Internet or launching some programs are temporarily disabled.

To temporarily resolve an extension conflict:

- Hold down the Shift key while you start up your Macintosh.

  This disables all extensions until you restart your Macintosh again.

  Note: This procedure disables all extensions that normally load while your Macintosh is starting up. You might observe that certain functions are temporarily disabled. However, the next time you restart your Macintosh, the functionality returns.

To eliminate the conflict:

1. Choose Control Panels from the Apple menu, and then open Extensions Manager.

   If you want to save the current configuration, go to the Extensions Manager window, click the Duplicate Set button, and give the duplicate set a different name.

   If you see a message that the selected set doesn't match the contents of your System Folder, click Create New Set, and give the set a descriptive name.

2 Use the Extensions Manager software to select the minimum number of extensions to load. On the Selected Set list, select one of the locked sets (indicated with a padlock icon).

3 Restart the computer with this set. If your computer behaves normally, you've identified the problem as an extension conflict.

4 Go back to the Extensions Manager, and start adding extensions back to your Selected Set. You will need to restart each time for the change to take effect.

For more information on system alterations, refer to your Macintosh documentation.

More troubleshooting procedures

If your problem still exists, and you have eliminated the more common sources of problems, you should begin serious troubleshooting procedures. The following procedures explain the typical things that an experienced technician might try, in the order he or she might try them. If your problems are simple, you won't have to go beyond the first procedure.

Replace a damaged disk driver

Replacing a disk driver is potentially dangerous because if it is done incorrectly, it will format your startup disk. The procedure described next is an outline of the most typical steps for replacing a driver. The exact procedure varies with each disk drive manufacturer, so you should refer to the user's guide that came with your hard disk for detailed instructions on how to update your device driver.

To replace a driver:

1 Start your Macintosh using the disk containing the setup utility that was used to format your hard disk.

If you still get a "Sad Mac," hold down the Command, Option, Shift, and Delete keys while restarting.

2 Open the utility application.

3 After locating your volume, look for a button or menu item named Update or Reinstall Driver.

In Drive Setup, choose Update Driver from the Functions menu. In the Apple HD SC Setup application, this button is named Update.

If an update or replace driver feature exists in the utility, select it only after you are certain of the following things:

- The correct volume has been chosen for the driver update.
- Updating the driver will not cause the volume to be reformatted or initialized. If the utility warns you that data will be lost, do not proceed.

Note: If you can't locate the device with the formatting software, chances are that there is a hardware problem.

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4 If you have successfully completed updating the driver, restart your Macintosh.

5 To ensure that no other problems exist, run Norton Disk Doctor.

Zap the PRAM (reset Parameter RAM)

The PRAM (Parameter RAM) is an area of RAM that is used to store information about your Macintosh. Part of the information stored by PRAM is needed by your Macintosh in order to locate the current startup device.

Because this information is needed each time you use your Macintosh, it is stored even when your Macintosh is turned off (a battery is activated when you shut down your Macintosh). If the information in PRAM becomes corrupted, you can clear this information and replace it with new information.

Tip: If your computer consistently does not retain the current date and time when you turn the computer off, your PRAM battery might need to be replaced.

Since resetting the PRAM resets the memory in your computer, some system settings, such as disk cache, mouse speed, menu blinking, time zone, and others will need to be reconfigured after this procedure.

To reset PRAM:

1 Restart your computer while holding down the Command, Option, P, and R keys.

2 As the system begins a restart, you will hear the startup chime repeat. Continue holding down the keys until the chime has sounded three or more times.

3 Release the keys and the startup should complete.

Rebuilding the Desktop

Desktop files are invisible files that help keep track of the files on each volume. As you work with a volume, information is added to these files. If they are damaged, they can cause startup problems. Rebuild the Desktop once a month.

Norton Disk Doctor lets you use the Finder's ability to rebuild Desktop files for selected disks.

To rebuild the Desktop:

1 Start Norton Disk Doctor.

2 On the Tools menu, click Rebuild Desktop.

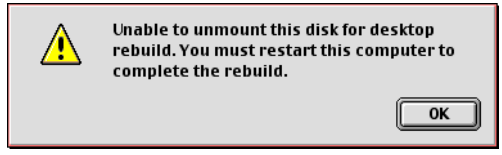
When you rebuild the Desktop, any comments you have added to the files' Get Info windows are lost, since the Desktop file containing these comments is deleted.

3 If asked to confirm, click OK.

4 If you don't want to see this alert the next time you rebuild the Desktop, click Don't show this alert again.

The Desktop files of the selected volumes are made visible and moved to the Trash, and the disks are unmounted.

If any disks cannot be unmounted, you are notified.



5 Click Restart.

The Desktop files are rebuilt by the Finder during startup.

If you click Continue, the unmountable volumes are remounted, and the Finder rebuilds the Desktop files for those volumes.

On disks with open files, the Desktop files are rebuilt the next time the computer is started.

Further options

If you are still unable to start your Macintosh using your startup disk, you might have a hardware problem that only a qualified service technician can fix. It might still be possible to recover files from the volume even though you can't start from it. See "Performing customized searches" on page 60 for directions on how to recover data from a damaged disk.

Reformat your hard disk

A hard disk can accumulate bad or weak sectors, known collectively as "bad blocks." When this happens, some sectors can no longer be accessed unless the hard disk is physically reformatted or low-level formatted.

This procedure should only be used if you have exhausted all repair options, including a professional data recovery service. Because reformatting the hard disk will destroy all existing information contained on the disk, you must recover as much information as possible from your damaged volume before you begin reformatting. If you have a recent backup, you just need to recover new files and files that have changed since the last backup.

Almost all hard disk formatting applications deal with bad blocks differently. Some manage to re-map the blocks using spare or unused sectors during the format process while others have a special procedure that needs to be run before or after formatting. Refer to the documentation that came with the formatting software for instructions on reformatting your hard disk.

Warning: Do not format your hard disk unless you have a backup of the damaged hard drive or have successfully recovered all of the files using UnErase or Volume Recover. For more information, see Chapter 3, "Repairing and recovering disks, files, and data" on page 47 for directions on recovering data from a damaged disk.

CHAPTER 3

Repairing and recovering disks, files, and data

About Norton FileSaver

Norton FileSaver keeps track of essential disk information on each volume. Norton Disk Doctor, UnErase and Volume Recover depend on the information collected by Norton FileSaver to restore damaged disks and data.

Norton FileSaver is scheduled to scan and update regularly, and you can customize its schedule and scanning behavior.

Configuring Norton FileSaver settings

Norton FileSaver saves critical disk information used to restore the disk's directory structure if damage occurs to your disk. This information is used by Volume Recover, Norton Disk Doctor, and UnErase. Norton FileSaver also scans your hard disks for potential problems and warns you if any are found.

Include infrequently used disks and removable media for protection. Mount them before starting Norton FileSaver.

You can change the level of Norton FileSaver protection, for example, if you are using resource-intensive activity and you don't want Norton FileSaver to scan as frequently while another application is running.

To change Norton FileSaver protection:

1. Open the Norton FileSaver Control Panel.
2. By default, Norton FileSaver is turned on. To temporarily disable it, click Off.
3. You can change settings for the following options:
   - Which disks to scan for problems
   - How frequently to update information
   - Whether to track deleted files and folders

   For full details of the settings for Norton FileSaver, see the *Norton Utilities for Macintosh Reference Guide* PDF file on the CD. For information on accessing the PDF file, see "Accessing the Reference Guide PDF" on page 16.

Warning: Permanently disabling FileSaver will significantly decrease your chances for success when recovering files and volumes with UnErase and Volume Recover.

Starting Norton Utilities for Macintosh

You can start most utilities from the Apple menu, the Norton Utilities main window, or from the Utilities menu when another utility is open.

To start Norton Utilities:

1. Do one of the following:
   - From the Apple menu, choose Norton Utilities.
   - Open the Norton Utilities folder and double-click the Norton Utilities icon.
2. In the Norton Utilities main window, click any Utility icon, or choose one from the Utilities menu.
3. The Control Panel utilities—DiskLight and Norton FileSaver—are available on the Control Panels submenu on the Apple menu. Norton Fast Find is available on the Apple menu.

Using Norton Disk Doctor

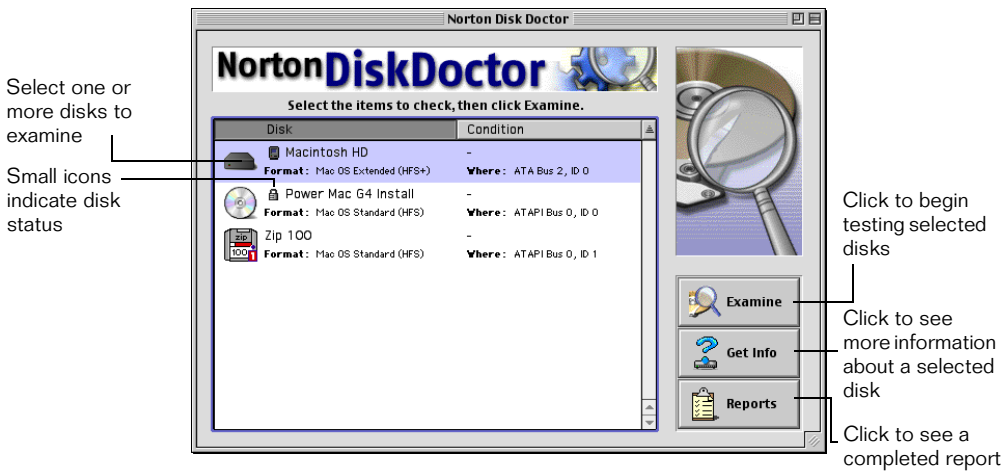
If this is an emergency situation, see "Starting and running Norton Utilities from the CD" on page 22 for instructions on using Norton Disk Doctor to repair your disk.

To examine a disk without first launching Norton Disk Doctor, use the Finder contextual menu command. Press the Control key and click the disk you want to examine, then click Disk Doctor Scan. You can also drag one or more disk icons from the Desktop to the Norton Disk Doctor icon in the Norton Tools folder.

To start Norton Disk Doctor:

1 Click the Norton Disk Doctor button in the Norton Utilities main window.

You can also double-click the Norton Disk Doctor icon in the Norton Tools folder.


Select one or more disks to examine
Small icons indicate disk status
Norton Disk Doctor
NortonDiskDoctor
Select the items to check, then click Examine.
Disk
Condition
Macintosh HD
Format: Mac OS Extended (HFS+)
Where: ATA Bus 2, ID 0
Power Mac G4 Install
Format: Mac OS Standard (HFS)
Where: ATAPI Bus 0, ID 0
Zip 100
Format: Mac OS Standard (HFS)
Where: ATAPI Bus 0, ID 1
Examine
Get Info
Reports
Click to begin testing selected disks
Click to see more information about a selected disk
Click to see a completed report

2 In the Norton Disk Doctor main window, select one or more disks.

- Shift-click to select more than one adjacent volume. Command-click to select non-adjacent volumes.
- To examine a removable media disk, insert it into an available drive. It will appear in the list even if it does not appear on the Desktop.

If a disk doesn't appear in the Norton Disk Doctor list, choose Show Missing Disks from the Disks menu. For more information, see "Locating missing disks" on page 69.

Tip: The Finder will sometimes try to eject a badly damaged floppy disk, or might crash when the disk is inserted. To add a floppy disk to Norton Disk Doctor's list without the Finder seeing it, hold down the Option key when you insert the disk. The floppy disk will not appear on the Desktop.

The small icons to the right of the disk icons indicate each disk's potential for examination and repair:

Macintosh icon
The disk contains the active System files and some repair functions will be limited.

Application icon
The disk contains the Norton Disk Doctor application and some repair functions will be limited.

Lock icon
The disk is write-protected and Norton Disk Doctor can examine the disk, but cannot perform any repairs on it.

If you see a disk without a name or with a name you do not recognize, select the disk and click the Get Info button, or choose Get Info from the File menu. The Get Info window displays information about the selected disk that might help you identify it.

3 Click Examine.

If you restarted from the CD (or have set your Preferences to Always Ask For An Undo File Location) Norton Disk Doctor might prompt you to choose a location for Undo files.

Because Norton Disk Doctor repairs directories during its scan, it is possible that a repair might cause an unwanted result. The Undo file lets you return your hard disk to the state before Norton Disk Doctor conducted the repair. Repairs to some problems can't be reversed.

4 Select a folder for the NDD Undo file and click Choose.

You should save the Undo file to a disk other than the one you are examining. By default, Norton Disk Doctor saves the Undo files at the root level of the boot drive, in a folder called Disk Doctor Undo Files.

Norton Disk Doctor checks every area of your hard disk, looking for problems that need immediate attention as well as file problems that could give you problems in the future.

Tip: For a description of the tests, see the chapter, "Norton Disk Doctor" in the *Norton Utilities for Macintosh Reference Guide* PDF file on the CD.

The scan window shows Norton Disk Doctor progress as it scans each selected disk for errors.

5 You can do the following in the scan window:

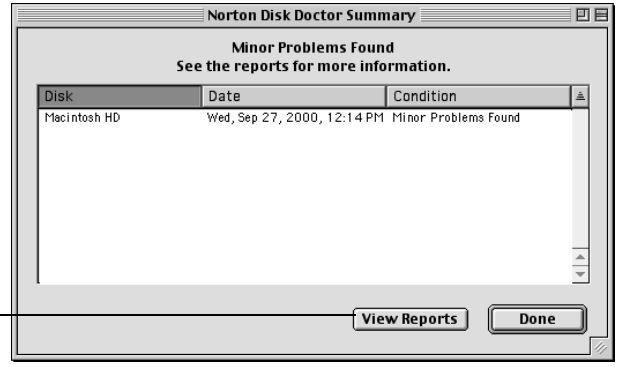
- Click Skip to skip an individual test.
- Click Skip Disk to skip the remainder of tests for this disk.

  If another disk is selected, Norton Disk Doctor proceeds to examine it.
- Click Stop to stop examining all disks.

6 If a problem is found, Norton Disk Doctor displays a problem alert to which you must respond. For more information, see "Responding to problems" in the chapter "Norton Disk Doctor" in the *Norton Utilities for Macintosh Reference Guide* on the CD.

If you are concerned about making a repair decision, click Skip in response to Norton Disk Doctor repair dialog boxes. After the disk examination is finished, print the Norton Disk Doctor Report for reference before running Norton Disk Doctor again.

When the scan is completed, Norton Disk Doctor displays the summary.



Click to view Norton Disk Doctor report

7 To view the report, click View Reports. Norton Disk Doctor displays the report, which you can view onscreen, print, or save to another file. For information on Norton Disk Doctor reports, see "Viewing the disk report" in the chapter "Norton Disk Doctor" in the *Norton Utilities for Macintosh Reference Guide* on the CD.

Recovering data with UnErase

Files emptied from the Trash remain on your disk until they are overwritten by other files. UnErase can locate and recover deleted files that are not overwritten. It can also salvage data from an irreparably damaged disk. Use UnErase when you have:

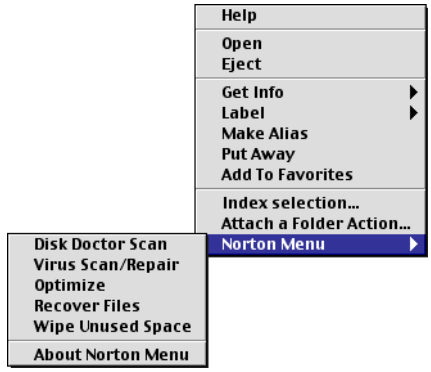
- Deleted files that you need to recover.
- Suffered irreparable damage to a disk and need to recover files or data.

Unfragmented files have a greater chance for recovery. Use Speed Disk on a regular basis to reduce file fragmentation. See "Optimizing disks, files, and free space with Speed Disk" on page 71 for more information.

Note: If you cannot find a file, but you do not think it was erased, try using Fast Find before using UnErase. For more information, see "Finding information with Fast Find" on page 83.

To UnErase files with the contextual menu:

1 Press the Control key and click the disk on which you want to locate erased files.



2 On the Norton Menu, click Recover Files.

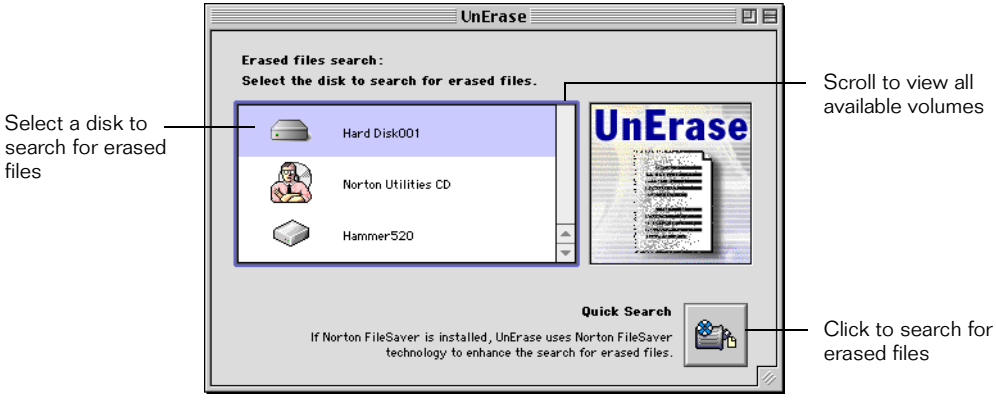
3 In the UnErase Search dialog box, locate the file you want to recover.

4 Follow the instructions in "To UnErase files:" below.

To UnErase files:

1 In the Norton Utilities main window, click the UnErase icon.

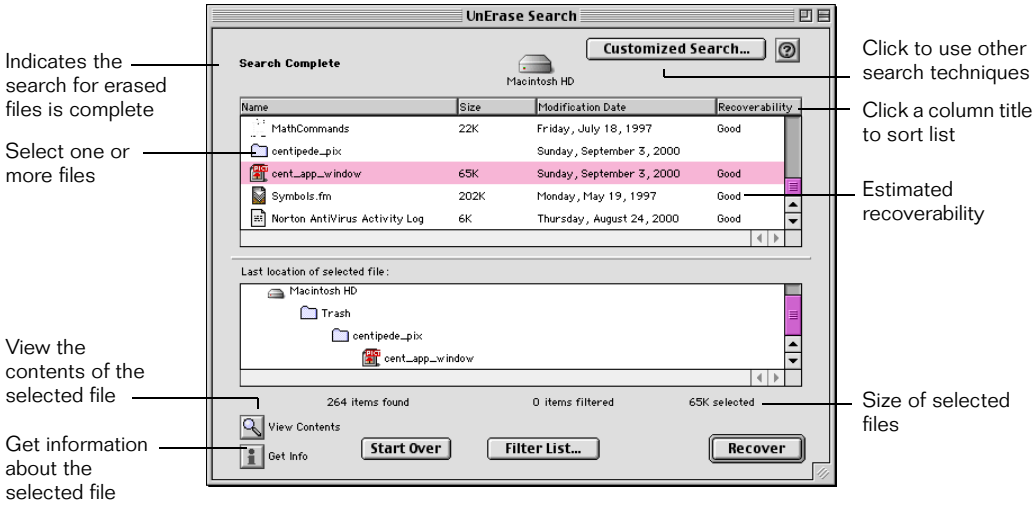
2 In the UnErase main window, select a volume to search.


UnErase
Erased files search:
Select the disk to search for erased files.
Hard Disk001
Norton Utilities CD
Hammer520
UnErase
Quick Search
If Norton FileSaver is installed, UnErase uses Norton FileSaver technology to enhance the search for erased files.
Select a disk to search for erased files
Scroll to view all available volumes
Click to search for erased files

Scroll to see available volumes. If the volume containing the missing file or data doesn't appear in this list, see "Locating missing disks" on page 69.

3 Click Quick Search.

UnErase searches the selected disk for erased files and displays the results in the UnErase Search window, with an estimate of successful recoverability.



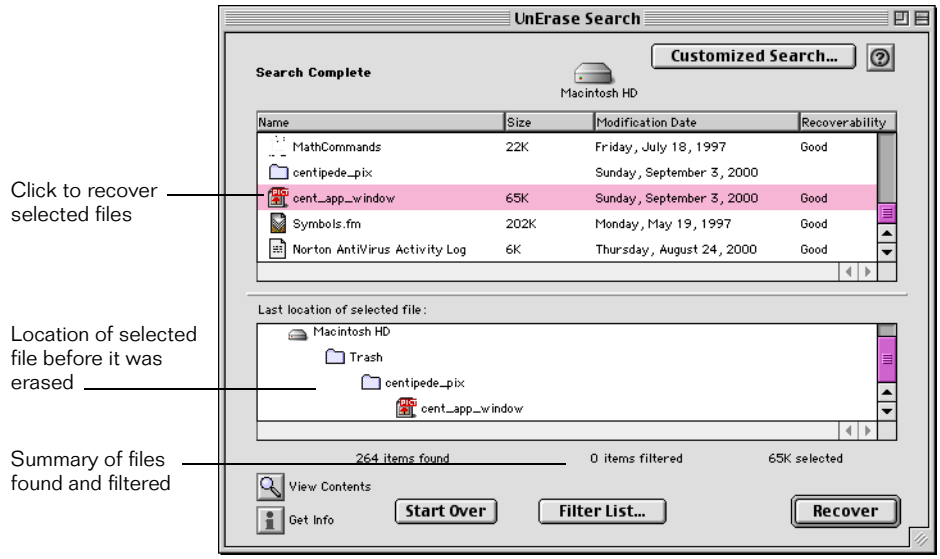
When you click a file in the top part of the window, its last known location appears in the lower part of the window.

- To sort the UnErase Search window listing, click the Name, Size, Modification Date, or Recoverability column title.
- To view more information or the contents of an erased file, select the file and click Get Info or View Contents. For more information, see "Viewing an erased file's information" on page 57.
- To eliminate unrecoverable files from the erased file list, on the Tools menu, click Hide Unrecoverable Files.

4 Select one or more files to recover.

- Shift-click to select several adjacent files. Command-click to select non-adjacent files.

A selected file's last location appears in the lower part of the UnErase Search window.



5 Click Recover.

The Recovery Destination dialog box confirms the files to be recovered and the disk from which you are recovering.

Names or number of files being recovered
Name of volume you are recovering from
Select a location for the recovered files
Click Recover to confirm and complete the recovery
Recovery Destination
You are recovering: Business Cards.fp5
Disk you are recovering from: Macintosh HD
Select a disk to recover to:
WARNING: Recovering a file to the same disk as the source file may reduce the chance of recovering the file!
Macintosh HD
Zip 100
93M free on disk
Cancel
Recover

6 Select a disk on which to save the recovered files.

It's best to choose a different hard disk, floppy disk, or other volume to save recovered files. If you have no other device to restore the files, you can recover a file to the same disk. You might overwrite the file

you are currently recovering, or other erased files that you still want to recover.

Tip: If you are on a network or have another computer connected through AppleTalk, you can mount a network volume using the Chooser and recover files to that disk using UnErase. You can even do this when you have booted from the Norton Utilities CD.

---

7 Click Recover.

UnErase recovers the files and displays a status message.

When UnErase recovers a file, it creates a folder with the same name and hierarchy as the folder in which the file last resided. This folder is placed within a folder called Recovered Files.

If you are recovering a file to a floppy disk and the file is larger than a single disk, be sure you have enough floppy disks to hold the recovered files. UnErase automatically splits large files across as many disks as necessary. You can use UnErase to rejoin the files later. For information on reuniting split files, see "Rejoining file segments" on page 68.

8 To recover more files from the UnErase Search window, repeat steps 4 through 7.

Warning: Be sure to save recovered files to a disk other than the one you're recovering from. Otherwise, you might overwrite other erased files you need to recover.

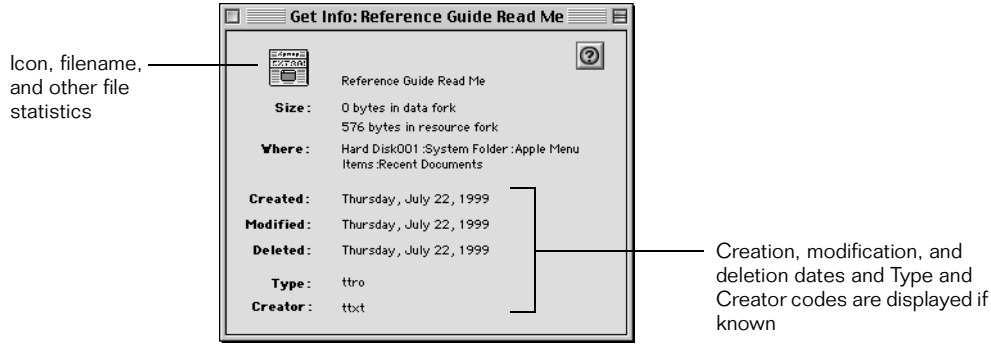
For more suggestions, see Chapter 4, "UnErase" in the *Norton Utilities for Macintosh Reference Guide* PDF file in the Documentation folder on the Norton Utilities for Macintosh CD.

Viewing an erased file's information

When you have the UnErase Search window open, you can select an erased file and view more information about it or view its contents.

To get information about an erased file:

1. In the UnErase Search window, select one or more files.
2. Click Get Info.



To view the contents of an erased file:

1. In the UnErase Search window, select one or more files.
2. Click View Contents.

Contents of File: Using AppleScript part 2
File name: Using AppleScript part 2
Modification date: Friday, May 30, 1997
25,385 bytes
Some applications store files in their own proprietary format that may include unreadable characters. Use this window to view and copy readable portions of the file.
Data Fork
Resource Fork
Copy to Clipboard
File name, program icon, and creation date
View data or resource fork
Select, cut, and paste contents of a file from this window

In some types of files you can view a data fork and a resource fork.

3 Click the Data Fork or Resource Fork button to view the file's data or resource fork contents. For more information about data and resource forks, see "Recovering data and resource forks" on page 66.

   In files that contain more than plain text, the contents might look like gibberish. This is normal computer code and does not mean that your file is damaged or unrecoverable. Look for fragments of text to help you determine whether the selected document is the one you're looking for.

4 To copy the file's contents to the Clipboard, drag across the text to select it, and click Copy to Clipboard.

Filtering the erased files list

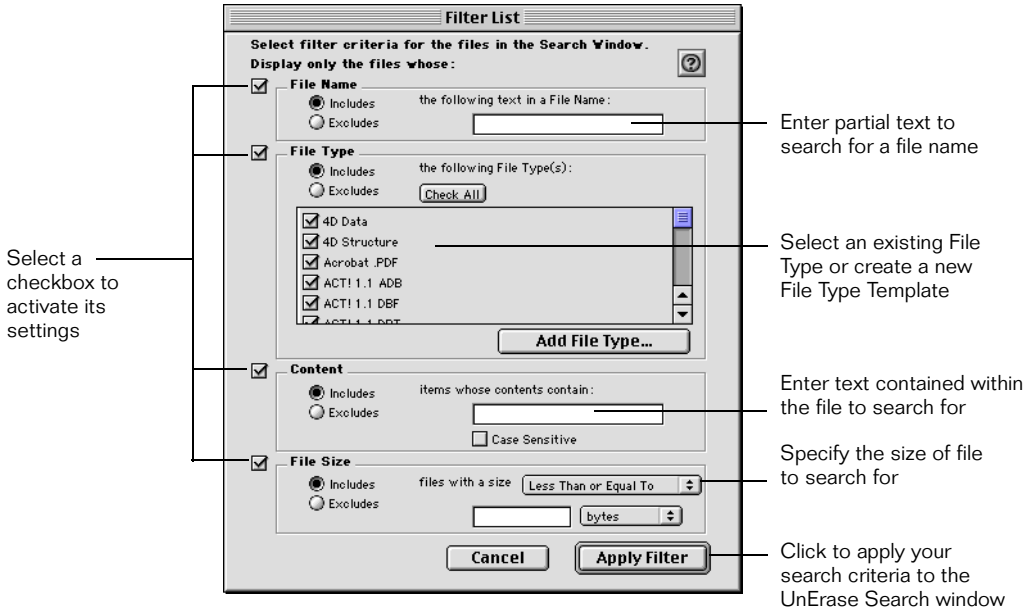
When UnErase searches for erased files, it might display many files and folders that you don't want to see. You can hide files you don't want to see by filtering them out of the UnErase Search window using the Filter List feature. For example, if you often use a specific type of graphic or document, you can define a filter that displays only those graphic or document file formats, and hides other types of erased files that you don't want to see.

You can create and save a filter for future use.

To eliminate unrecoverable files from the erased file list, on the Tools menu, click Hide Unrecoverable Files before using a Quick Search.

To filter the list of erased files:

1 From the UnErase Search window, click Filter List.



2 In the Filter List dialog box you can set the following options:

File Name Displays only the files whose names match the criteria you specify. Select the File Name checkbox, then enter the filename text. Select Include or Exclude to indicate whether to include or exclude the text from your display.

File Type Displays only the file types you specify. Select the File Type checkbox, then select a file type from the list. Select whether to include or exclude these types of files from your display.

You can also specify a different File Type by clicking the Add File Type button. For more information on adding File Type templates, see "Creating File Type templates" on page 64.

Content Displays only those files whose contents match the criteria you specify. Select the Content checkbox, then enter the text you want to use as criteria. Select whether to include or exclude this text from your display.

File Size Displays files whose size matches the criteria you specify. Select the File Size checkbox, select Less Than Or Equal To or Greater Than Or Equal To from the list, enter a value in the text box, and choose a measurement of bytes, K (kilobytes), or MB (megabytes).

3 Click Apply Filter.

The filter is applied to the list of files in the current UnErase Search window. The total number of files found and filtered appears in the bottom of the window.

Applying or removing a filter

A filter is active until you remove it, apply another filter, or quit UnErase.

To remove a filter:

- From the UnErase Search window, click Remove Filter.

To apply a different filter:

1 From the UnErase Search window, click Filter List.

2 In the Filter List dialog box, uncheck any selected checkboxes.

3 Click Apply Filter to remove the previously applied filter.

The total number of files found and filtered appears at the bottom of the UnErase Search window.

Performing customized searches

If a quick search does not give you the desired results, you can customize a search to look for erased files or lost data. A customized search might find erased files not found through a quick search.

A customized search is also the best way to recover files from a disk with irreparable directory damage. Use a customized search when Norton Disk Doctor and Volume Recover can't restore your disk.

There are several search methods to choose from. If you do not find a file with the first method used, you can try another, or you can use multiple methods simultaneously.

Performing Catalog, File Type, and Text searches

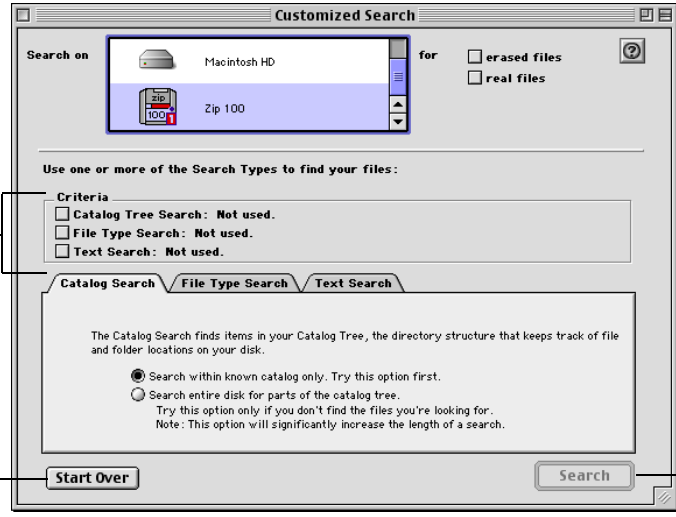
Use UnErase customized searches to suit your requirements. If you cannot locate a file with a Quick Search but you remember the application used to create it, try a File Type Search. Use a Text Search to search for specific text within a file.

If the directories are damaged and you are trying to recover files, then you should try the Catalog Search, with Real and Erased Files options.

To specify a Customized Search type:

1 If you have already performed a Quick Search, click Customized Search at the top of the window.

From the UnErase main window, you can choose Customized Search from the Tools menu, or press Command-B.


Customized Search
Search on
Macintosh HD
Zip 100
for
erased files
real files
Use one or more of the Search Types to find your files:
Criteria
Catalog Tree Search: Not used.
File Type Search: Not used.
Text Search: Not used.
Catalog Search
File Type Search
Text Search
The Catalog Search finds items in your Catalog Tree, the directory structure that keeps track of file and folder locations on your disk.
Search within known catalog only. Try this option first.
Search entire disk for parts of the catalog tree.
Try this option only if you don't find the files you're looking for.
Note: This option will significantly increase the length of a search.
Start Over
Search

Select a checkbox to specify search criteria and move the related tab to the front

Restart the UnErase search

Search with customized settings

By default, the volume selected in the main window or Quick Search is selected.

2 Select the disk to search on.

3 Select options to tell UnErase where to search.

- Erased Files

  UnErase looks for files in the unused, erased files area of your disk. If your disk is healthy, select this option.

- Real Files

  UnErase searches the currently used parts of your hard disk directory for files that do not appear to have been intentionally deleted. When performing a File Type or Text search, UnErase searches the used parts of a disk, where files are expected to exist. If your disk directory information has been damaged, you will obtain the best results by selecting both the Real Files and Erased Files checkboxes.

  If files or folders seem to have disappeared for no reason, try the Rebuild Directories feature in Volume Recover. For information on Rebuild Directories, see "Rebuilding directories" on page 33.

4 Select one or more of the following search methods:

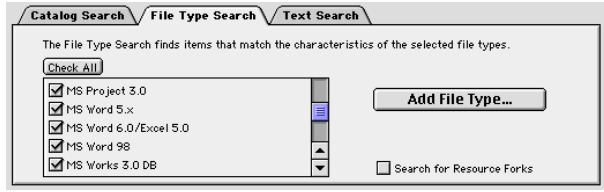
- Catalog Search

  Searches the disk directory for valid file records. If you are looking for Erased Files only, and your hard disk is functioning normally, do not select Search Entire Disk For Parts Of The Catalog Tree.

  If your hard drive has crashed, or a large number of files have unexpectedly disappeared, try the Catalog Search for Real Files and Erased Files, first with Search Entire Disk deselected. If large numbers of files are still missing, search again with this checkbox selected. Selecting this option will slow down the search significantly.

- File Type Search

  A File Type Search is most useful when Quick Search has not found the erased files you need, or when the Catalog Search is unsuccessful.When using this search method, you can search for files created by specific applications.


Catalog Search
File Type Search
Text Search
The File Type Search finds items that match the characteristics of the selected file types.
Check All
MS Project 3.0
MS Word 5.x
MS Word 6.0/Excel 5.0
MS Word 98
MS Works 3.0 DB
Add File Type...
Search for Resource Forks

a If an application's file type doesn't show up on the list, you can click Add File Type to specify an application, and create a template to use for searching. See "Creating File Type templates" on page 64.

Because directory information is not referenced in a File Type Search, the UnErase window will list generic filenames (such as Photoshop 2/3/4/5 #1, and so on). Rename the files after you recover them, or join the file forks with the Join Forks command. For more information, see "Recovering data and resource forks" on page 66.

b Click the Search For Resource Forks to have UnErase search for all resource forks on the drive, in addition to the selected file types. When this box is not selected, UnErase finds only the resource forks belonging to the selected File Types.

Searching for Resource Forks is particularly useful for recovering fonts, as well as many types of Preferences files that can't be found as specific file types.

- Text Search

Lets you search for words or phrases that you know were in a file, but not the name of the file itself. Use a Text Search when salvaging word processing documents or other text-based data files, or when you cannot remember the name of an erased file.

Text Searches are useful for finding saved email files. Try searching for your own email address to find mail that you have sent or received.

Catalog Search
File Type Search
Text Search
The Text Search finds items that contain the text you enter.
Find the following text within the search file(s)
now is the winter of our discontent
Case Sensitive

a Enter a word or phrase from the file in the Search Text box.

UnErase finds all files that contain the search text.

b Select Case Sensitive to further restrict the search. For example, "Mark" is not a match for "mark" when Case Sensitive is selected.

Directory information is not referenced in a Text Search so the UnErase window lists generic filenames (such as Text File #1, and so on). Rename the files after you recover them, and verify that the recovered information is correct.

Note: Make sure you have specified the maximum file size for text and file type searches in UnErase Preferences. By default, this size is set to 40960K. If you find that the files being found are too large or too small, adjust this size. Because the same value is used for both types of searches, you might get the best results by performing these searches separately, setting the size appropriately for each.

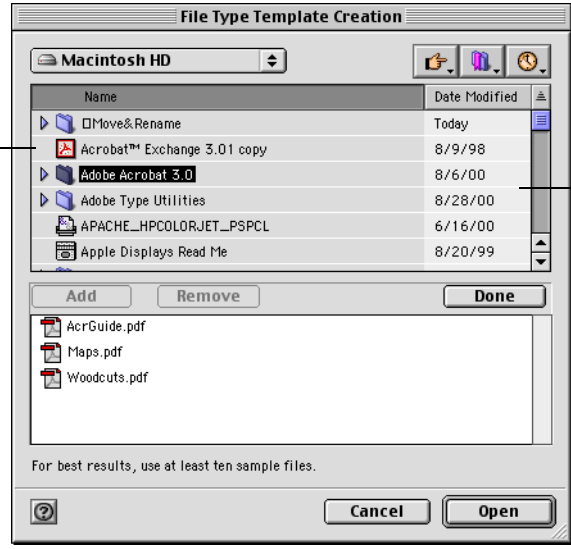
Creating File Type templates

UnErase lets you create a File Type template that identifies files created by a particular application. This template is created from a selection of data files created by the application. Once a File Type template is created, use it to search for erased files.

To create a File Type template:

1 With the UnErase Search window open, on the Tools menu, click Create File Type Template.

A dialog box appears where you can select files for UnErase to create a File Type template.



Locate examples of a file type

Add files of the same type to create a File Type template

The files selected should be of exactly the same type as the file type you want to recover.

For example, if an application can create word processing or spreadsheet documents, you might wish to create a template for these types of files. Do not mix together both types of files when creating the template. Use only word processing documents in one template and spreadsheets in another.

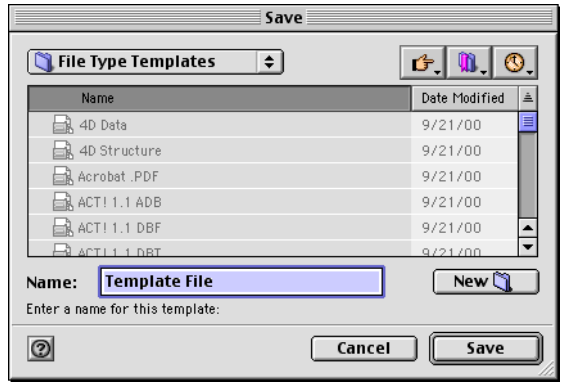
2 Locate and select a file of the desired type, and then click Add.

Added files are listed in the lower part of the window.

3 Continue adding files of the same type. For best results, you should add at least ten sample files of the same type to create a template.

4 Click Done.

A dialog box appears where you can enter a location and name for the File Type template. Use a name that will help you remember the file type. For example, if you are creating a ClarisWorks word processing file type, you might call the template "Claris WP."



5 Enter a name and click Save. It is best to save the new template to the File Type Templates folder in the Norton Tools folder. This is the default location.

The File Type template is saved for the next UnErase search.

In order for UnErase to use a template you create, you must make sure it is located in the same folder as the default File Type Templates that are shipped with Norton Utilities. Without these other File Type Templates, UnErase can't locate the ends of recovered files.

If you wish to be able to use a new File Type Template when you restart from the Norton Utilities CD, or at a time when you are not able to access your hard drive, copy the File Type Templates folder from the Norton Utilities CD to another disk, such as a Zip disk, a floppy disk, or another hard drive. Add your custom template to this copied folder.

When you start UnErase from the Norton Utilities CD, click Preferences on the Edit menu and specify this copied folder as the desired location for the File Type Templates folder. This ensures that UnErase will use your custom File Type Template.

Recovering files from the Trash

When UnErase recovers a file using a Norton FileSaver or Catalog search, it creates a folder with the same hierarchy and name as the last folder in which the file resided, as in the following example:

If you have previously dragged a file to the Trash and then emptied the Trash, UnErase attempts to determine the folder from which the file was originally taken. If necessary, UnErase creates a Trash folder inside the Recovered Files folder. Do not confuse this folder with the original Trash. Move the file out of this recovered files Trash folder, and put the temporary Trash folder into the real Trash.

Recovering data and resource forks

When you use UnErase to recover a file using a File Type search, you might have to perform some additional work to recover the entire file. Some Macintosh files have two parts:

- **Data Fork:** The part of a file that contains text, graphics, or other modifiable information.
- **Resource Fork:** The part of a file that contains information used by an application, such as menus, fonts, icons, or executable code.

The majority of document files have only a data fork, although some have both a data fork and a resource fork. UnErase lists each fork as a separate file in a File Type search.

Joining resource and data forks

Because directory information is not referenced in a File Type Search, a data fork is listed with a generic name identifying the document type, for example, Photoshop 2/3/4/5 #1.data. A resource fork is listed with the original file name of the document, and the suffix, .rsrc, for example, Artwork.rsrc. In most cases, the data fork is the one that contains the essential file data you want to recover.

When you recover an erased file with a resource fork and a data fork, you might have to rejoin the two parts to restore the file to its original condition. The resource fork can also be a great help in determining the original name of the file.

Because the data and resource forks of a file are often physically adjacent on the hard drive, you can often identify a data fork by the name of the resource fork next to it. For example, if you find a file called Photoshop 3 4/5 #25.data, and next to it is a resource fork with a Photoshop icon and the name Cover Photo.rsrc, it is likely that these two forks belong to the same file.

- If you have sorted the list of files, you will need to restore the order in which the files were originally found before you can see which forks lie next to each other. To do this, Option-click any unselected column heading. This removes any sorting from the list.
- If you can't find a resource fork to help you name a file, you can rename a data fork once you have established the contents of the file. Once you have recovered the file, open it and use the Show Contents command to help identify it.

To join a single resource and data fork:

1. In the UnErase Search window, on the Tools menu, click Join Forks.
2. Click Select File, and navigate to the file whose forks you want to join.
3. Select a single resource fork and a single data fork. Command-click to select non-adjacent files.
4. When you have selected exactly one of each fork type, click Join Forks on the Tools menu. The original name of the file is filled in for you; if you wish, you can enter a different filename.
5. Click Save to rejoin the file.

If you have already recovered the files to be joined, follow the next procedure.

To join resource and data forks of recovered files:

1. With the UnErase main window open, choose Join Forks from the Tools menu.
2. Do the following in the Join Forks dialog box:
   a. Click the first Select File button, locate and select the data fork in the appropriate Recovered Files folder, and click Open.

      The file name appears next to the first Select File button.

   b. Click the second Select File button, locate and select the resource fork in the appropriate Recovered Files folder, and click Open.

      The file name appears next to the second Select File button.

   c. Click the third Select File button and, in the dialog box that appears, select a location for the joined file, enter a name for the joined file, and click Save.

      When you have identified the data fork, resource fork, and have entered a filename, the Join button becomes available.
3. Click Join Forks.

   UnErase displays the status of the joined file.

   If the join is successful, you should be able to open the file using the application that created it.

Rejoining file segments

If UnErase recovers an erased file to a floppy disk, and the file is too large to fit on a single floppy disk, UnErase divides the file into floppy disk-sized segments. You can rejoin these segments using the following procedure.

To rejoin file segments:

1. Make sure you have the component files available and enough disk space for the restored files.
2. Insert the floppy disk with the first segment of the recovered file.

   The first segment is named "<filename>#1" with subsequent segments numbered consecutively.
3. On the Tools menu, choose Join Split Recovered Files.
4. Select the file to be recovered and click Rejoin.

5 Enter a name and destination for the recovered file, and click Save.

UnErase completes the process, prompting you to insert the disks with the file segments as necessary. Make sure to insert the disks in the correct order.

Locating missing disks

When a disk has damaged file system information, it will not be recognized as a disk. When a disk is not listed in the Norton Disk Doctor, UnErase, or Volume Recover main window, you can try to locate it in the following ways:

- Search for data structures characteristic of the disk.
- Locate devices by their ID numbers or other information.

To try to locate a missing disk:

1 On the Disks menu, click Show Missing Disks.

The tool you're using rescans all active connected devices to find all available drives again.

If a disk is found, it appears in the tool's main window.

2 To recover lost data from the located disk, use the procedure, "Performing customized searches" on page 60. Since this disk's directory structures might be damaged, you should search for both Real and Erased files.

If these techniques fail, you can use the Add Custom Disk feature to manually enter specific data regarding the disk you want to recover.

To use the Add Custom Disks feature:

1 Click Add Custom Disks.

2 In the list of devices, click the triangle to display available devices.

3 Click the volume.

4 Click Add.

The recovered device appears in the tool's main window.

For more information on these search techniques, see "Selecting missing disks" in the chapter "Norton Disk Doctor" in the *Norton Utilities for Macintosh Reference Guide* on the CD.

Recovering FileSaver data with Volume Recover

Volume Recover restores critical partition and directory information (from existing Norton FileSaver files) to disks on which this data is damaged or missing. In most cases, use Volume Recover only if prompted by Norton Disk Doctor.

For more information, see "Using Volume Recover to restore FileSaver information" on page 31.

Volume Recover also rebuilds directories on damaged disks, making it possible to restore a drive even when no FileSaver data is available. For information about recovering directory information using Volume Recover, see "Rebuilding directories" on page 33.

Warning: Files added since Norton FileSaver was last updated are not recovered. If you are trying to locate files that were created after the most recent Norton FileSaver update, use UnErase first to locate and recover those files. Then use Volume Recover to restore the disk's directory information.

CHAPTER 4

Enhancing performance and security

Optimizing disks, files, and free space with Speed Disk

During normal file operations, file and free space fragments are created on the hard disk. As they are created, modified, and deleted, files can become larger and outgrow the original number of blocks allocated for them on a hard disk, or become smaller and no longer need all of their allocated space. For growing files, the Mac OS file system must find a new location for the overflow parts. For shrinking files, empty space might be left behind.

Over time, fragments of a file might be scattered in different areas of the hard drive, away from the original location of the file. These multiple file fragments are tracked in the disk catalog.

Speed Disk maximizes disk drive performance. It measures file fragmentation, defragments files, and optimizes placement of files on disk according to the selected profile.

Defragmentation vs. optimization

The terms defragmentation and optimization are often used interchangeably. However, they are not the same.

- *Defragmentation* is the process of rearranging the way files are organized on a hard drive so that the data comprising each file is stored in contiguous disk blocks.
- *Optimization* maximizes the usable free space on a hard drive and groups files based on how they are accessed. The most frequently

used files are placed where they can be accessed in the shortest time. Infrequently used files are placed out of the way. Free space is consolidated to avoid fragmenting newly added files, and extra space is added after major data structures so that they can grow without immediately becoming fragmented again. Optimization can improve performance, after initial optimization and on a continuing basis.

Preparing for optimization

Make the following preparations before optimizing any drives:

Before optimizing, do this	Why you should do it
Run Norton Disk Doctor to identify and repair any bad blocks before running Speed Disk.	Although Speed Disk automatically checks for errors before optimizing, it's best to run Norton Disk Doctor to identify and repair any bad blocks or other file or disk damage that could cause problems during optimization. Running Norton Disk Doctor also ensures that lost file fragments are not included in the optimization. For more information, see "Using Norton Disk Doctor" on page 49.
Delete temporary and obsolete files such as any Internet temporary files, the Trash, and so on.	This avoids the extra work of optimizing obsolete, unused, and trash files that consume optimization time and resources. Including these files in optimization means that useful space is occupied by useless files, causing the drive to become refragmented when these files are emptied from the Trash or erased from temporary folders.
Complete any major software installations or uninstallations before optimizing.	This reduces the necessity to reoptimize after the installation or uninstallation. Typically, installation processes create temporary files, and occupy large amounts of space temporarily. Uninstalling programs after optimizing creates unnecessary work.

Before optimizing, do this	Why you should do it
Back up your files.	It's always a good idea to back up your software. Although Speed Disk maintains the integrity of your data, we strongly recommend that you back up important files before making any major changes to your drives, including optimization. Maintaining a schedule of regular backups is good practice at any time.
Make sure your disk driver has been updated with the latest version of the manufacturer's formatting software.	It is important to make sure your computer is communicating with your hard disk drive properly before you optimize it. If you know you have the latest version of the driver software, you might still wish to update or reinstall the driver with that utility to ensure that the driver is functioning correctly when you optimize. If your hard disk is factory installed, use the hard disk setup software that came with your computer, for example, Apple's Drive Setup utility. Otherwise, either use the software that came with the hard disk or contact the manufacturer for the current driver.
Remove any driver-level security software, or remove any other write protection on the disk.	Because some copy-protected software makes use of hidden files that might be moved during Speed Disk optimization, it might be necessary to uninstall certain copy-protected applications before optimizing, then reinstall them after optimizing to ensure that those files remain in their expected locations. For further information, consult the security application's documentation.

About unmovable anchor files

Some files and file fragments are classified as unmovable. Files designating bad blocks on the drive, and some types of security files can't be moved.

Fragments on the drive identified by Speed Disk as unmovable are not moved during optimization. You can also designate any file or group of files to be unmovable. For more information, see "About unmovable anchor files" on page 73.

Running Speed Disk

Speed Disk normally runs with the General Use optimization setting, designed for most users. However, there are other settings that Speed Disk can use for purposes such as CD mastering, multimedia use, or just to consolidate free space. For more information, see "Using built-in Speed Disk profiles" on page 78. You can also design custom Speed Disk profiles. For more information, see "Creating custom Speed Disk profiles" on page 80.

Note: To optimize your startup disk, you must restart your computer from another disk or CD that contains the Mac OS, such as the Norton Utilities for Macintosh CD.

To start Speed Disk:

1 Do one of the following:

- In the Norton Tools folder, double-click Speed Disk.
- In the Finder, Command-click a disk to open the contextual menu, and click Optimize Disk.
- In the Norton Utilities main window, click Speed Disk.

  A dialog box displays recommended precautions to take before running Speed Disk.

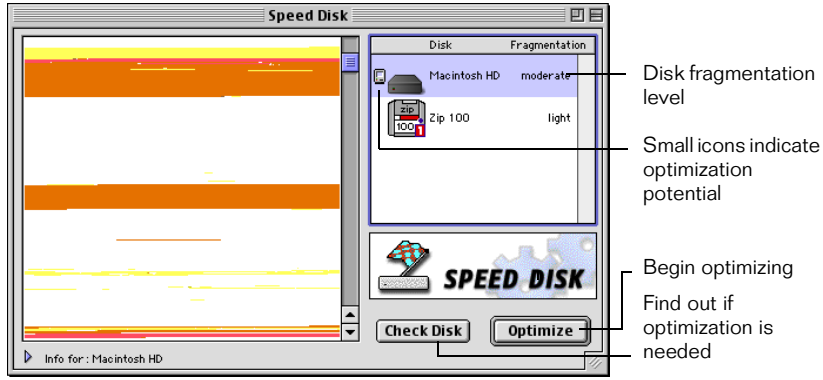
SPEED DISK
Before optimizing your disk, it is recommended that you...
• run Norton Disk Doctor,
• back up important data,
• make sure you have the latest disk driver software,
• do not have the disk password-protected.
Don't show this alert again
OK

Click to prevent this alert from appearing every time you launch Speed Disk

2 Read the information, and then click OK.

  Be sure you have read and taken the precautions outlined under "Preparing for optimization" on page 72 before continuing with optimization.

The Speed Disk main window appears. Available disks are listed, with their fragmentation status, in the upper-right panel of the window.



The smaller icons to the left of the disk icons indicate each disk's potential for optimization. The small icons to the right of the disk icons indicate each disk's potential for examination and repair.

Macintosh icon

The disk contains the active system files and can't be optimized. You can defragment files not in use by the System.

Application icon

The disk contains the Speed Disk application and can't be optimized.

Lock icon

The disk is write-protected and can't be optimized or defragmented.

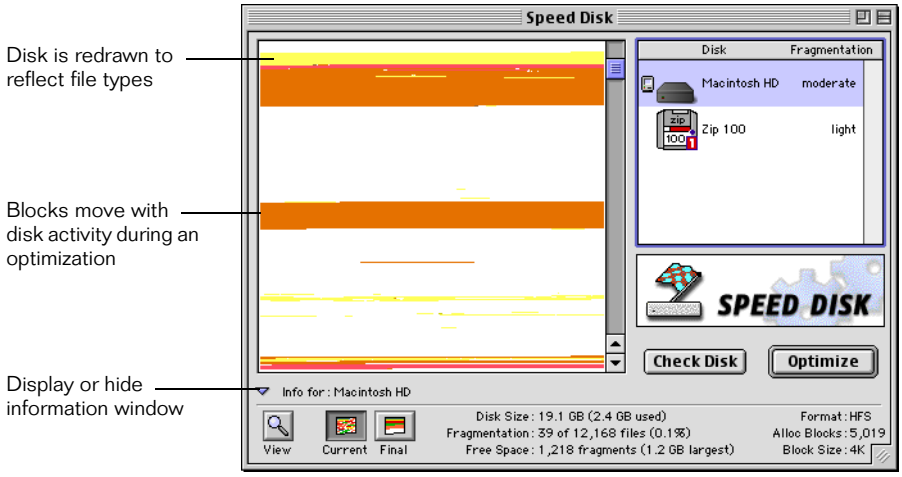
3 Click the disk to optimize.

Speed Disk displays a disk map, with used areas displayed in black and free areas in white. White space indicates areas of the disk where no data is currently stored.

4 Click Check Disk to generate a fragmentation summary.

You must run Check Disk before Speed Disk can estimate a disk's fragmentation level. If you want to optimize a disk regardless of the fragmentation level, you do not need to run Check Disk first.

Speed Disk checks the selected disk, redraws the disk map, and reports the amount of file fragmentation.

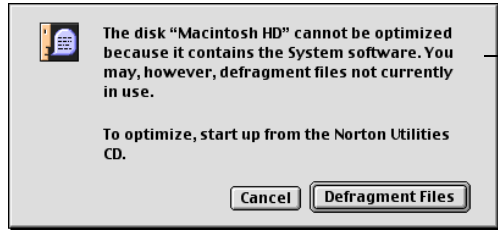


5 Click Optimize.

Speed Disk starts checking the selected disk.

For a list of the processes Speed Disk performs, see "Phases of optimization" in the Speed Disk chapter in the *Norton Utilities for Macintosh Reference Guide* PDF on the CD.

If you are trying to optimize your boot disk, Speed Disk informs you that you can defragment files.


The disk "Macintosh HD" cannot be optimized because it contains the System software. You may, however, defragment files not currently in use.
To optimize, start up from the Norton Utilities CD.
Cancel
Defragment Files

See "Defragmentation vs. optimization" on page 71

To optimize your boot disk, you will have to restart from the Norton Utilities CD, or from another startup disk.

6 If this message appears, click Defragment Files to have Speed Disk defragment files on the boot disk.

If you are trying to optimize your disk and documents or other non-system files are open, a message appears.

The disk "untitled" cannot be completely optimized because some files are in use.
Cancel
Show Open Files
Click to display open files

7 If this message appears, click Show Open Files to display what files are open, so you can close them and continue optimizing.

To view a list of fragmented files and select individual files for defragmentation, see "To defragment files:" below.

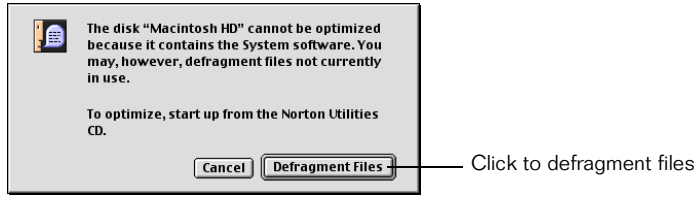
When optimization is complete, Speed Disk has defragmented files and arranged file types for optimal use.

If FileSaver protection is enabled for a disk, Speed Disk automatically updates FileSaver information when it finishes optimizing. For more information, see "Configuring Norton FileSaver settings" on page 47.

To defragment files:

1 Run Speed Disk. See "To start Speed Disk:" on page 74.

A message informs you that you can't optimize the Startup Disk.


The disk "Macintosh HD" cannot be optimized because it contains the System software. You may, however, defragment files not currently in use.
To optimize, start up from the Norton Utilities CD.
Cancel
Defragment Files
Click to defragment files

2 Click Defragment Files.

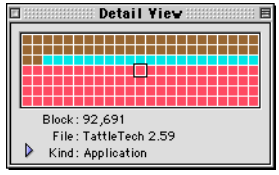
Speed Disk defragments all of the files on the selected disk.

For more information on selecting individual files to defragment, and other Speed Disk features, see "Speed Disk" in the *Norton Utilities for Macintosh Reference Guide* PDF file on the CD.

About the disk map

The disk map indicates which parts of the disk are occupied and which are free, and lets you follow the optimization progress.

- After Speed Disk checks the disk, the map is redrawn with each file type shown in a different color, or in shades of gray on monochrome monitors.
- On HFS+ (extended) format disks, you can scroll up and down to view disk map activity if the map is too large to fit in the window. You can also enlarge the entire Speed Disk window.
- Use the Detail View to view details of each block in the disk map.



For more information, see "Using advanced options" in the chapter "Speed Disk" in the *Norton Utilities for Macintosh Reference Guide* on the CD.

Using built-in Speed Disk profiles

You can use Speed Disk built-in profiles to specify how files are optimized. You can also customize your own profiles. For more information, see the *Norton Utilities for Macintosh Reference Guide* on the CD.

Deciding which profile settings to use

In general, Speed Disk default settings for placing files provide the best performance. Change the drive's default settings only if your files require special consideration.

For example, if you use a disk utility that updates certain file dates even when those files have not been used, you might want to limit optimization on these files so Speed Disk doesn't move them to the area of the disk reserved for frequently used files.

Choose from the following built-in profiles:

- General Use

  Optimizes and groups similar file types together. Places free space in the middle of the drive. Places items in the Trash and Temporary Items folders adjacent to free space so they will not cause the free space to fragment when they are deleted.

- Multimedia

  Quickly maximizes adjacent free space without optimizing. Ideal when preparing to create a very large file that should not be fragmented.

  Caution: Using the Multimedia profile, Speed Disk rearranges files quickly, but does not defragment them or optimize their placement. Selecting this profile might even cause further file fragmentation.

- Software Development

  The same as General Use, but moves project files and source files close to free space.

- CD-ROM Mastering

  Optimizes and places files, including hidden FileSaver files, at the front of the disk. This profile assumes no files will be deleted from the disk before mastering.

- Recently Used Files

  Defragments only the most recently used files, and places them next to free space. Does not optimize the disk. This profile is the ideal way to quickly defragment frequently-used files.

- Disk Resizing

  Like CD-ROM Mastering, but also places items in Trash and Temporary Items folders adjacent to free space. Useful when preparing to resize a partition created by formatting software.

- Speed Disk 3.2

  Uses the optimization pattern from Speed Disk 3.2. The Speed Disk 3.2 profile uses fewer file types than the other profiles. If you optimize a disk with this profile and then check the disk using another profile, the disk might not appear to be optimized.

Creating custom Speed Disk profiles

Using Speed Disk Profile Editor, you can create your own Speed Disk profiles if the built-in profiles don't meet your needs. The Speed Disk Profile Editor is located in the Norton Tools folder.

The Speed Disk Profile Editor lets you create, manage, and view customized Speed Disk profiles. You can use the Profile Editor to create profiles for specific performance requirements to match your computing activity. For information on creating customized Speed Disk Profiles, see the *Norton Utilities for Macintosh Reference Guide* PDF on the CD.

Viewing computer statistics with System Info

System Info analyzes your computer's performance and characteristics, and compares the results with other computers, or other configurations of your computer.

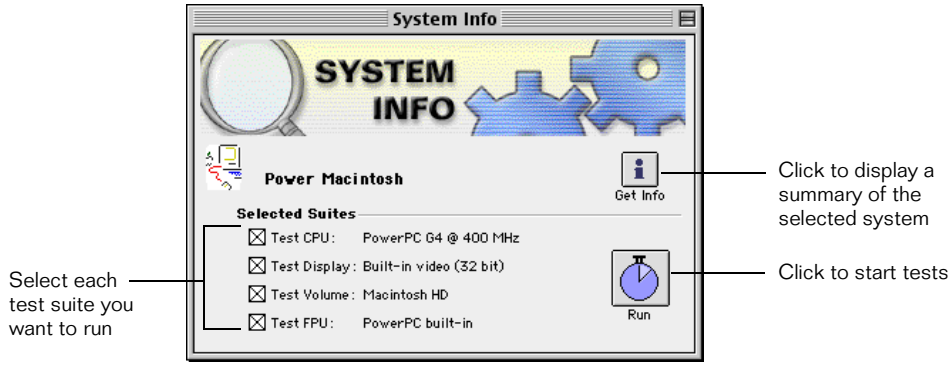
System Info runs a series of tests to measure your computer's performance. You can use System Info to:

- Test the performance of your system.
- Generate a report of your current system configuration.
- Compare the speed of your system to other Macintosh computers.
- Test a Power Macintosh to compare native versus emulated performance.

You can also generate a system configuration report, including a machine overview, the video type, disk information, and installed system extensions. For more information, see the *Norton Utilities for Macintosh Reference Guide* PDF on the CD.

To run System Info:

1. Start Norton Utilities.
2. On the Utilities menu, click System Info.


System Info
SYSTEM INFO
Power Macintosh
Get Info
Selected Suites
Test CPU: PowerPC G4 @ 400 MHz
Test Display: Built-in video (32 bit)
Test Volume: Macintosh HD
Test FPU: PowerPC built-in
Run
Select each test suite you want to run
Click to display a summary of the selected system
Click to start tests

Some systems can be tested in different configurations. For example, you might have more than one hard disk, or you might have a color and a monochrome monitor connected.

3. To select different test suites, choose Show More Choices from the Benchmarks menu.

   To return to the basic level, choose Show Fewer Choices from the Benchmarks menu.

4. Select the test suites you want to run in the System Info main window.
5. Select the configuration you want to test from the lists in the System Info main window.

   Some systems have only one option for some (or all) of the suites. Your system must support an option before it appears. For example, you must be running on a Power PC to support Power PC and Emulated 68020 as other configuration options. The multiple hard drive option is only available if more than one hard drive is available.

Note: Do not move the mouse or type on the keyboard while running benchmarks. Doing so can affect test results.

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6. Click Run.

   A Power Macintosh can be run in native mode or emulated 68020 mode. When you choose to test an emulated CPU on a Power Macintosh, all suites are run in emulated mode, not just the CPU tests.

To run tests in native mode, you must have the Power PC native version of System Info installed. The default installation on a Power Macintosh computer installs the correct version.

When System Info completes the tests, the System Ratings window appears comparing the system to other popular models.

To view an overall suite rating:

- On the Show list, click CPU, Video, Disk, or FPU.

To change the order of the listing:

- Click the title of a results column, such as System Name or System Rating or choose a sort column from the View menu.

  For System Name, the order is alphabetical. For a ratings column, the order is descending performance.

Tip: To sort in reverse order, hold down the Option key while clicking a sort column.

To save test results for future review:

- On the File menu, click Save Current System As.

To review existing results without running the tests:

- On the Benchmarks menu, click Show System Ratings.

To run a specific test:

1. On the Benchmarks menu, click a test suite.
2. On the submenu, click the specific test.

To view specific test results:

1. On the Show list, click a suite.
2. To choose a specific test, click the Rating button (over the ratings column).

Tip: Test your system's performance with and without Extensions and Control Panels loaded. Some Extensions, particularly on Power Macintosh computers, can slow down video performance substantially. To prevent Extensions and Control Panels from loading, hold down the Shift key while restarting your computer.

Finding information with Fast Find

Fast Find helps you find and manage files quickly and easily. It quickly searches one or more mounted devices (including network drives) for the file of your choice. It also lets you view file contents and information.

As the number of files on your disk increases, finding the one you want can become difficult. Fast Find lets you search local hard disks, removable disks, and network drives. It can also search in the background while you are using another application.

Use Fast Find to:

- Locate files or folders.
- View documents without opening the application that created them.
- Launch documents and applications.
- View or change a file's technical information.
- Modify a file or folder icon.
- Search for files by their Type or Creator signature.
- For details on using Fast Find, see the chapter, "Fast Find" in the *Norton Utilities for Macintosh Reference Guide* on the CD.

Displaying read/write activity with DiskLight

DiskLight lets you know when a drive (hard disk, removable disk, CD-ROM drive, or other storage device) is being accessed, locally or over a network, by flashing an icon in the menu bar.

For details on using DiskLight, see the chapter, "DiskLight" in the *Norton Utilities for Macintosh Reference Guide* on the CD.

Erasing files permanently with Wipe Info

Wipe Info erases files and volumes so they are unrecoverable. This provides greater security for any sensitive data that might be in your erased files.

Unlike the other Norton Utilities, which protect, rescue, and improve access to your data, Wipe Info destroys data permanently. Use Wipe Info the same way you would use a paper shredder—when you want to be sure that a thrown away file or folder cannot be recovered by any means.

Caution: Be very careful using Wipe Info. There is no way you can recover files that have been erased with Wipe Info. When a file or folder is wiped, it is gone forever.

This section explains how to use Wipe Info to:

- Permanently remove unwanted files and folders. See "Wiping a file or folder" on page 85.
- Completely erase a hard disk so that data cannot be recovered. See "Wiping an entire disk" on page 86.
- Completely erase a removable media device. See "Wiping an entire device" on page 88.
- Erase unused space on a disk to prevent recovery of erased files. See "Wiping unused disk space" on page 89.
- Use extra wiping security. See "Increasing security" on page 90.
- Create a Wipe Info Trash can. See "Creating a Wipe Info Trash can" on page 91.

When you empty the trash or erase a hard disk, only the bookkeeping information about the disk is modified. The data from erased files remains on the disk—even though the filenames no longer appear in any folder—until the space is needed to store other files. This poses a security risk for sensitive and confidential documents.

Wipe Info eradicates old data by writing new, meaningless data on top. Not even a Symantec technician will be able to recover anything from your disk that you have wiped.

You can also use Wipe Info to clean the unused space on your disk, to ensure that no sensitive data inside erased files remains on your disk.

The Wipe Info main window lets you access the three disk wiping operations—Wipe File, Wipe Disk, and Wipe Unused Space. A fourth option, Wipe Entire Device, is available from the Wipe menu. Because you cannot recover wiped data, Wipe Info has built-in safeguards to avoid accidental data loss. You are asked to confirm each operation before data is irretrievably destroyed.

To start Wipe Info:

1 Do one of the following:

- Use the contextual menu to run Wipe Info. In the Finder, Control-click a file, folder, or disk, and click Wipe or Wipe Unused.
- On the Utilities menu, click Wipe Info.

Wipe Info
Wipe individual files or entire folders.
Wipe File/Folder
Wipe an entire disk.
Wipe Disk
Make files you have already thrown away unrecoverable.
Wipe Unused
Note:
Once you erase something with Wipe Info, it is gone forever.
The Norton Utilities will not be able to recover the information later.

Click Wipe File (or Folder), Wipe Disk, or Wipe Unused Space

2 In the Wipe Info window, click one of the following:

- Wipe File/Folder

  Lets you select a file or folder to erase. See "Wiping a file or folder" on page 85.

- Wipe Disk

  Lets you select an entire disk to erase. See "Wiping an entire disk" on page 86.

- Wipe Unused

  Lets you select a disk whose unused space you want to erase. See "Wiping unused disk space" on page 89.

3 To wipe an external device, choose Wipe Entire Device from the Wipe menu.

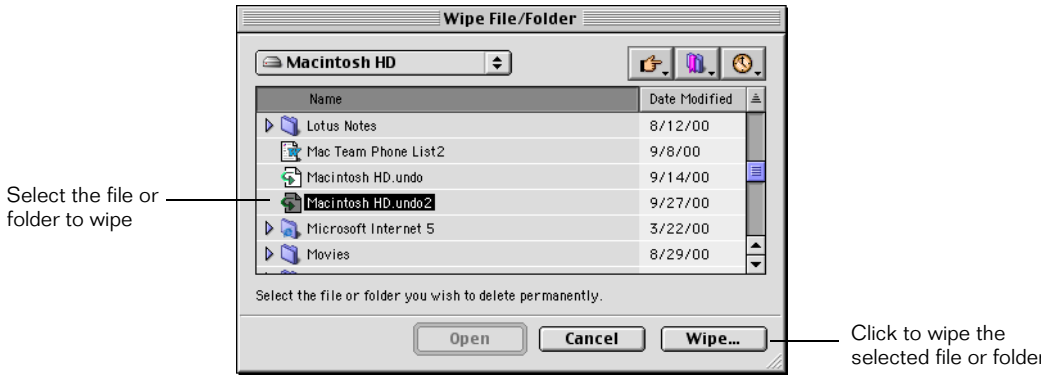
Wiping a file or folder

With Wipe Info you can specify to eradicate either a single file or a folder filled with files. If you must do this regularly, create a Wipe Info Trash can on the desktop so you can destroy unwanted data without having to start Wipe Info each time. See "Creating a Wipe Info Trash can" on page 91 for directions.

Caution: If a folder is wiped, all files and folders inside the selected folder are wiped as well.

To wipe a file or folder:

1 In the Wipe Info main window, click Wipe File.



2 Locate and select a file or folder to delete.

3 Click Wipe.

You are asked to confirm the deletion.

4 Click Wipe.

Wipe Info erases the selected file or folder permanently.

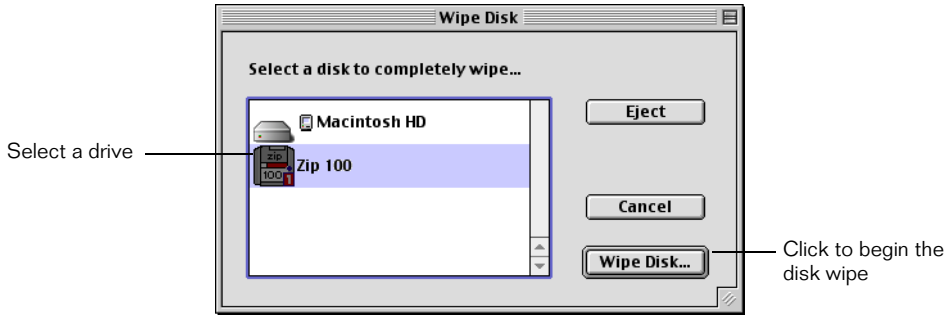
Wiping an entire disk

When you wipe an entire disk, Wipe Info irretrievably eradicates everything on the disk. After you confirm the operation, all data on the disk is gone permanently.

Note: You can’t wipe your current startup disk.

To wipe a disk completely:

1 In the Wipe Info main window, click Wipe Disk.



2 Select the volume to wipe.

You can insert a removable disk and select it in the window. The icons in the Wipe Disk window indicate whether or not they can be completely wiped.

Macintosh icon The disk contains the active system files and can't be wiped. You can free space, files, and folders.

Lock icon The disk is write-protected and can't be wiped.

3 Click Wipe Entire Disk.

4 Enter a new name for the disk.

5 Click Wipe.

Wipe Info erases the entire selected disk permanently.

Wiping an entire device

You can wipe any USB, SCSI, or IDE device, such as a FireWire or Zip drives, internal or external hard disk drives, and more.

Wiping a device removes all formatting and partition information. After you wipe a device, it does not appear on the Desktop until it is reformatted. Before using Wipe Device, locate the software used to format the device.

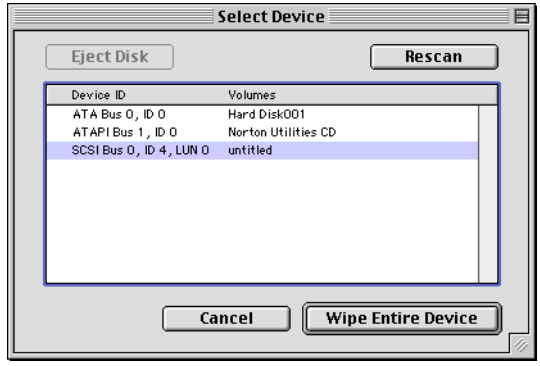
Caution: After erasing the device, you will need to reformat it with a compatible formatting software program such as Apple's Drive Setup, FWB Hard Disk Toolkit or a similar disk tool designed to work with the device make and model.

To wipe a disk completely:

1 On the Wipe menu, click Wipe Entire Device.

In the Wipe Entire Device window:

- The left column of the window lists all known devices on the selected bus.
- The right column lists the names of all mounted disks.



2 If the device you want to wipe is not listed, do the following:

- If it is a removable disk device, insert the disk you want to wipe.
- Re-check all cables and power to devices.
- Click Rescan to look for other devices.

3 Select a device in the list.

4 Click Wipe Entire Device.

Completely erase the device:
"SCSI 0,4,0".
You will not be able to recover any data!
You will need to run a disk formatting application such as "Drive Setup" before this disk can be used again.
Cancel
Wipe

5 To confirm the device wipe, click Wipe.

If the device is large, the wiping process might take a long time to complete.

Wiping unused disk space

When you wipe the unused space on a disk to prevent recovery of erased files, all files—including files that are in the trash—are untouched. Remember to empty the trash first.

Wiping unused space on a disk makes it impossible for UnErase to recover erased files.

If you want to wipe your boot volume, restart from the Norton Utilities for Macintosh CD and run Wipe Info. For more information, see "Starting from the CD" on page 11.

To make sure your FileSaver data is up-to-date, make sure FileSaver is turned on and set to update directory information before wiping the unused space.

To wipe unused disk space:

1 Do one of the following:

- Click Wipe Unused Space.
- On the Wipe menu, click Unused Space.

2 Select the device whose unused space you want to wipe.

3 Insert removable media.

4 Click Eject to eject a removable disk and insert another.

5 With the volume selected, click Wipe Unused Space, and then confirm the wipe.

Using UnErase after wiping unused disk space

If you need to use UnErase with FileSaver soon after you have used Wipe Info to wipe unused space, it is possible that UnErase might list filenames of files that you previously deleted, and then were wiped from the unused disk space. These files no longer exist and are not recoverable, but if FileSaver was not turned on when the unused disk space was wiped clean, its file list is not up-to-date.

FileSaver information still lists files for recovery, even though they cannot be recovered.

To remove the names of the non-existent files:

1. Launch Norton Utilities Fast Find.
2. Select the drive on which you wiped Free Space.
3. Type the name "Norton FS Data" (no quotes).
4. Click the "Running Man" find button.
5. When the Norton FS Data file is found, select it.
6. Choose from the File menu "Move...to Trash".

   The next time you empty the Trash, the Norton FS Data file will be deleted. You can then run Wipe Free Space once more to ensure that the contents of the deleted Norton FS Data file are destroyed.

For more information on updating FileSaver, see "About Norton FileSaver scans" in the chapter "Norton FileSaver" in the *Norton Utilities for Macintosh Reference Guide* on the CD.

Increasing security

To meet especially high security requirements, Wipe Info provides a Security Wipe option. With this process, Wipe Info first writes the pattern specified in the Configure Security Wipe window, and then writes a complement of these characters. Finally, Wipe Info writes zeroes over the file space. This Security Wipe process uses DOD-approved methods.

To use Security Wipe:

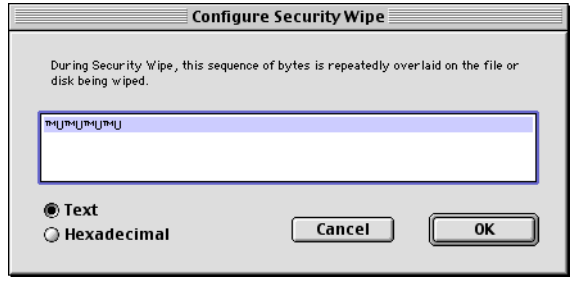
- On the Options menu, click Security Wipe.

  To remove the security wipe checkmark, choose Security Wipe from the Options menu again.

All future wipe operations use the Security Wipe option until you choose a different option.

To configure Security Wipe:

1 On the Options menu, click Configure Security Wipe.


Configure Security Wipe
During Security Wipe, this sequence of bytes is repeatedly overlaid on the file or disk being wiped.
Text
Hexadecimal
Cancel
OK

2 In the Configure Security Wipe dialog box, click a wipe option:

- Text (Command-T)

  Wipe Info uses patterns of text characters to wipe the disk.

- Hexadecimal (Command-H)

  Wipe Info uses patterns of hexadecimal characters to wipe the disk.

Creating a Wipe Info Trash can

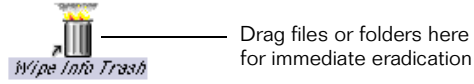
You can create a Wipe Info Trash can on the Desktop to work in conjunction with the regular Trash. The Wipe Info Trash lets you destroy unwanted data without having to start Wipe Info each time. If Wipe Info is configured for Security Wipe, it also applies to the Wipe Info Trash.

The Finder Trash can is unaffected by the Wipe Info Trash can.

To create a Wipe Info Trash can:

- On the Options menu, click Create Wipe Info Trash.

  The Wipe Info Trash can appears in the lower-left corner of the screen.



To remove the Wipe Info Trash, open the Options menu and click Remove Wipe Info Trash.

To use the Wipe Info trash:

- Drag a file or folder to the Wipe Info Trash for immediate eradication.
- Drag a disk icon to the Wipe Info Trash to wipe the free space on that disk.
- The Wipe Info Trash behaves differently from the usual Trash. If you drag an alias to the Wipe Info Trash, you destroy the file that the alias represents—not the alias.

  If you want to throw away an alias but keep its file or folder, do not use the Wipe Info Trash. Instead, choose Wipe Files and folders from within Wipe Info, and select the alias file to be wiped.

  Alternatively, you can create an empty folder and place the alias to be wiped in that folder. You can then safely wipe the folder containing the alias using Wipe Info Trash, and the original will be unaffected.

Using contextual menus

You can access Norton Utilities commands from anywhere on your computer using contextual menus. You access contextual menus via the Control key on your keyboard.

The following Norton Utilities commands are available on the Norton contextual menu:

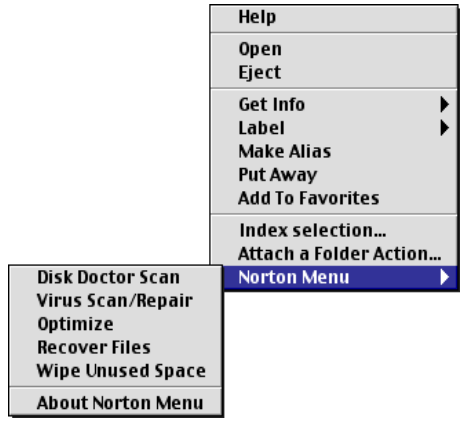
- Disk Doctor Scan: Launches Norton Disk Doctor and scans for problems on the selected disk. This command is only available when you have a disk selected.
- Optimize: Launches Speed Disk and optimizes the selected disk.
- Defragment: Launches Speed Disk and defragments the selected files.
- Recover Files: Launches UnErase, performs a Quick Search, and shows the files found.
- Wipe/Wipe Unused: Launches Wipe Info and wipes the selected file or folder. If a disk is selected, the unused free space is wiped.

To use the contextual menu:

1. Press the Control key and click anywhere on the Desktop.

   Depending on where you click, different options appear on the menu.

2. Click Norton Menu.



   If the command you need does not appear on the submenu, in the Finder, click on a different item.

3. Click an available command.

C H A P T E R 5

Keeping program files current

LiveUpdate can be used to keep your program files updated. If you have an Internet connection, LiveUpdate is the most efficient method to update your files.

If you use America Online (AOL) as your Internet Service Provider (ISP), you must log on to AOL before you use LiveUpdate. For more information, see "Using LiveUpdate with America Online" on page 102.

You can't run LiveUpdate while booted from the Norton Utilities for Macintosh CD.

About LiveUpdate

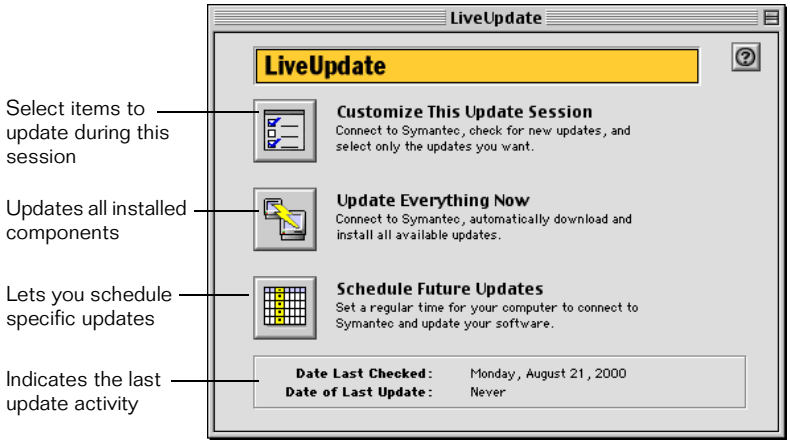
Symantec provides online access to updated program files with your subscription.

Using your existing Internet connection, LiveUpdate connects to the Symantec LiveUpdate server, checks for available program updates, then downloads and installs them.

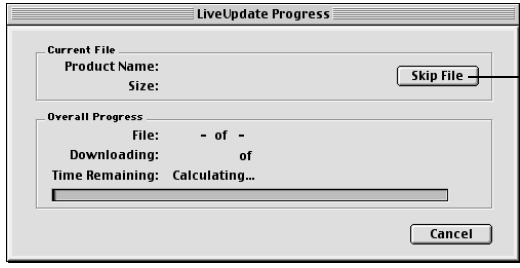
You can run LiveUpdate manually, or use the LiveUpdate scheduler. For more information, see "Scheduling LiveUpdate" on page 100.

Updating program files

You can have LiveUpdate look for updates to all files at once, customize your update selection, or schedule a future LiveUpdate session.

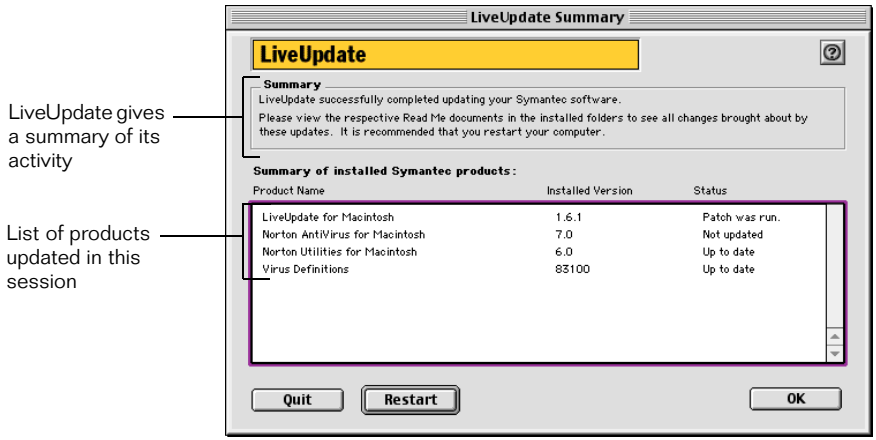

LiveUpdate
LiveUpdate
Customize This Update Session
Connect to Symantec, check for new updates, and select only the updates you want.
Update Everything Now
Connect to Symantec, automatically download and install all available updates.
Schedule Future Updates
Set a regular time for your computer to connect to Symantec and update your software.
Date Last Checked: Monday, August 21, 2000
Date of Last Update: Never
Select items to update during this session
Updates all installed components
Lets you schedule specific updates
Indicates the last update activity

LiveUpdate downloads and installs the available updates. A status dialog box keeps you informed of the file transfer process.



The file transfer takes a few minutes. When the file transfer is complete, LiveUpdate notifies you.

If your files are up-to-date, LiveUpdate informs you.


LiveUpdate gives a summary of its activity
List of products updated in this session
LiveUpdate Summary
LiveUpdate
Summary
LiveUpdate successfully completed updating your Symantec software.
Please view the respective Read Me documents in the installed folders to see all changes brought about by these updates. It is recommended that you restart your computer.
Summary of installed Symantec products:
Product Name
Installed Version
Status
LiveUpdate for Macintosh 1.6.1 Patch was run.
Norton AntiVirus for Macintosh 7.0 Not updated
Norton Utilities for Macintosh 6.0 Up to date
Virus Definitions 83100 Up to date
Quit
Restart
OK

To update program files with LiveUpdate:

1. On the Norton Utilities main window, click LiveUpdate.
2. Click Update Everything Now.
3. To specify what to update during the current session, click Customize This Update Session.

   For more information on this option, see "Customizing a LiveUpdate session" on page 99.
4. To open the LiveUpdate Scheduler and schedule LiveUpdate events, click Schedule Future Updates.

   For information on scheduling, see "Scheduling LiveUpdate" on page 100.
5. Click Close.
6. If LiveUpdate tells you that you need to restart your computer, click Restart.
7. On the File menu, click Quit.

Emptying the Trash after a LiveUpdate session

After you update program files with LiveUpdate, there are items in the Trash. LiveUpdate moves the older discarded files to the Trash. Empty the Trash. If you haven't already restarted after installing the application, you might get a message that these files are in use. After you restart your computer, you can empty the Trash.

Reading the LiveUpdate What's New file

LiveUpdate places a What's New file on the Desktop. This contains details of what files were updated by LiveUpdate.

To read the What's New file:

- Double-click the file to read about the contents of the updated files.

  The file opens in SimpleText.

To close the What's New file:

- Press Command-Q to quit SimpleText.

To delete the What's New file:

- Drag it to the Trash.

Checking version numbers and dates

LiveUpdate lets you know if your program files are up-to-date by displaying the version numbers and the status. You can also check the program file and virus definitions in the application's About box, accessible from the Apple menu.

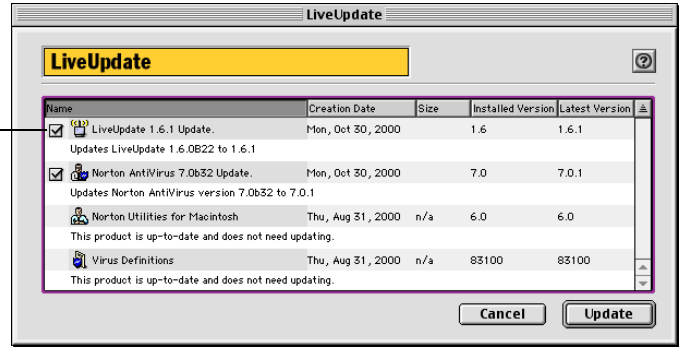
To view an application's About box:

1. Start Norton Utilities.
2. On the Apple menu, click About Norton Utilities.

   The About box lists version number and copyright dates.
3. When you've finished viewing the About box, click OK.

Customizing a LiveUpdate session

To update only one or two items, select them and omit the items you don't want to update.



Select items to update during the current session

To customize a LiveUpdate session:

1. In the LiveUpdate window, click Customize This Update Session.

   Liveupdate scans your disk to see what applications are installed, and presents a list of available updates.

2. Check items to update in this session.

   LiveUpdate will not look for items that are unchecked. If your files are already up-to-date, no items are selectable.

3. Click Update.

   The file transfer takes a few minutes. When file transfer is complete, LiveUpdate notifies you.

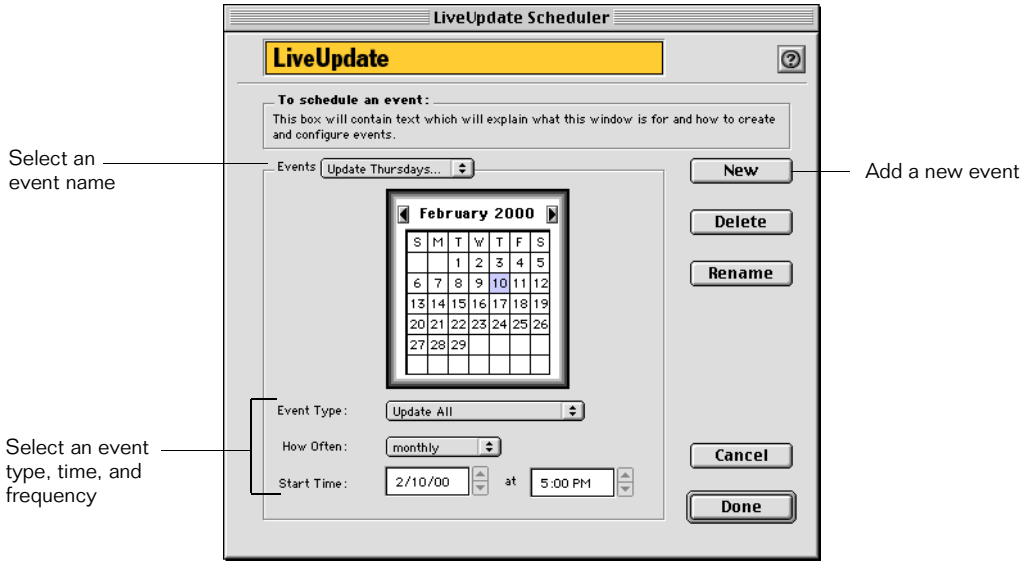
   If your files are up-to-date, LiveUpdate informs you.

Scheduling LiveUpdate

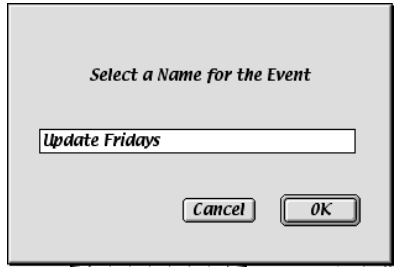
You can schedule automatic LiveUpdate sessions to update program files. Using the LiveUpdate Scheduler, you can set up events to run automatically.

To schedule a LiveUpdate event:

1 In the LiveUpdate main window, click Schedule Future Updates.



2 In the LiveUpdate Scheduler dialog box, click New.



3 Type the event name.

4 Click OK.

5 Specify the Event Type, How Often, and the Start Time of updates.

The days on which updates occur are highlighted in the calendar. Dates for other scheduled events are underlined.

6 Finish scheduling the update by typing the schedule time and date.

- Click the Hour text box and use the arrow keys to set the start hour.
- Click the Minute text box to set the start minute.

Your computer must be turned on for LiveUpdate to run at the scheduled time. If your computer is not on at the scheduled time, LiveUpdate starts the next time you start your computer.

If this page doesn't load, go to http://www.sarc.com and click the Download Virus Definition Updates link.

Deleting the file

1 In the File View list, double-click your hard disk and Click OK.

2 Click anywhere on your Desktop.

3 On the Special menu, click Empty Trash.

Downloading updates from the Symantec Web site

The latest virus definitions files are posted regularly on the Symantec Web site.

To download files from the Symantec Web site:

1 Start your Internet browser and go to the following site:

http://www.sarc.com/avcenter/defs.download.html

If this page doesn't load, go to http://www.sarc.com and click the Download Virus Definition Updates link.

2 On the Download Virus Definitions page, click Norton Utilities for Macintosh, along with your preferred language.

3 Click Download Updates.

4 On the Download Updates page, click the file to download.

Be sure to click files for the Norton Utilities for Macintosh Version 7.

Information about the update is included with the download and a text file describes how to install the update.

Using LiveUpdate with America Online

If you use America Online (AOL) as your Internet Service Provider (ISP), you might need to log on to AOL before you use LiveUpdate.

To use LiveUpdate with AOL:

1. Log on to AOL.
2. On the AOL Welcome page, click the AOL Internet browser.
3. Start LiveUpdate.
4. Follow the procedure from "To update program files with LiveUpdate:" on page 97.
5. When the LiveUpdate session is complete, quit AOL.

   If your LiveUpdate session requires that you restart your computer, disconnect from AOL before restarting.

Service and support solutions

Service and support information is available from the Help system of your Symantec product. Click the Service and Support topic in the Help index. Macintosh users can click the About... command on the Apple menu, and then click Info to view Technical Support and Customer Service contact information.

Technical support

Symantec offers several technical support options:

- StandardCare support

  Connect to the Symantec Service & Support Web site at http://service.symantec.com, then select your product and version. This gives you access to product knowledge bases, interactive troubleshooter, Frequently Asked Questions (FAQ), and more.

- PriorityCare, GoldCare, and PlatinumCare support

  Fee-based telephone support services are available to all registered customers. For complete information, please call our automated fax retrieval service at (800) 554-4403 and request document 933000.

  For telephone support information, connect to http://service.symantec.com, select your product and version, and click Contact Customer Support.

- Automated fax retrieval

  Use your fax machine to receive general product information, fact sheets, and product upgrade order forms by calling (800) 554-4403. For technical application notes, call (541) 984-2490.

Support for old and discontinued versions

When a new version of this software is released, registered users will receive upgrade information in the mail. Telephone support will be provided for the old version for six months after the release of the new version. Technical information may still be available through the Service & Support Web site (http://service.symantec.com).

When Symantec announces that a product will no longer be marketed or sold, telephone support will be discontinued 60 days later. Support will be available for discontinued products from the Service & Support Web site only.

Customer service

Visit Symantec Customer Service online at http://service.symantec.com for assistance with non-technical questions and for information on how to do the following:

- Subscribe to the Symantec Support Solution of your choice.
- Obtain product literature or trialware.
- Locate resellers and consultants in your area.
- Replace missing or defective CD-ROMS, disks, manuals, and so on.
- Update your product registration with address or name changes.
- Get order, return, or rebate status information.
- Access customer service FAQs.
- Post a question to a Customer Service representative.

For upgrade orders, visit the online upgrade center at: http://www.symantec.com/upgrades/ or call the Customer Service Order Desk at (800) 568-9501.

Worldwide service and support

Technical support and customer service solutions vary by country. For information on Symantec and International Partner locations outside of the United States, please contact one of the service and support offices listed below, or connect to http://www.symantec.com, select the country you want information about, and click Go!

Service and support offices

North America

Symantec Corporation
175 W. Broadway
Eugene, OR 97401

http://www.symantec.com/
Fax: (541) 984-8020

Automated Fax Retrieval

(800) 554-4403
(541) 984-2490

Argentina, Chile, and Uruguay

Symantec Region Sur
Cerrito 1054 - Piso 9
1010 Buenos Aires
Argentina

http://www.symantec.com/region/mx
+54 (11) 4315-0889
Fax: +54 (11) 4314-3434

Asia/Pacific Rim

Symantec Australia Pty. Ltd.
408 Victoria Road
Gladesville, NSW 2111
Australia

http://www.symantec.com/region/reg_ap/
+61 (2) 9850 1000
Fax: +61 (2) 9817 4550

Brazil

Symantec Brazil
Av. Juruce, 302 - cj 11
São Paulo - SP
04080 011
Brazil

http://www.symantec.com/region/br/
+55 (11) 531-7577
Fax: +55 (11) 5530 8869

Columbia, Venezuela, the Caribbean, and Latin America

Symantec América Latina
2501 Colorado, Suite 300
Santa Monica, CA 90404

http://www.symantec.com/region/mx/
+1 (541) 334-6050 (U.S.A.)
Fax: (541) 984-8020 (U.S.A.)

Europe, Middle East, and Africa

Symantec Customer Service Center P.O. Box 5689 Dublin 15 Ireland	http://www.symantec.com/region/reg_eu/ +353 (1) 811 8032 Fax: +353 (1) 811 8033
Automated Fax Retrieval	+31 (71) 408-3782

Mexico

Symantec Mexico Periferico Sur No. 3642, Piso 14 Col. Jardines del Pedregal 09100 Mexico, D.F.	http://www.symantec.com/region/mx +52 (5) 661-6120; +1 (800) 711-8443 Fax: +52 (5) 661-8819

Virus protection subscription policy

If your Symantec product includes virus protection, you might be entitled to receive free virus protection updates via LiveUpdate. The length of the free subscription could vary by Symantec product.

When you near the end of your virus protection subscription, you will be prompted to subscribe when you start LiveUpdate. Simply follow the instructions on the screen. After your free subscription ends, you must renew your subscription before you can update your virus protection. Renewal subscriptions are available for a nominal charge.

To order a subscription, do one of the following:

- Visit our Web site at: http://www.shop.symantec.com.
- Outside the United States, contact your local Symantec office or representative.

Every effort has been made to ensure the accuracy of this information. However, the information contained herein is subject to change without notice. Symantec Corporation reserves the right for such change without prior notice.

October 2000

Norton Utilities for Macintosh
CD Replacement Form

CD REPLACEMENT: After your 60-Day Limited Warranty, if your CD becomes unusable, fill out and return 1) this form, 2) your damaged CD, and 3) your payment (see pricing below, add sales tax if applicable), to the address below to receive replacement CD. *DURING THE 60-DAY LIMITED WARRANTY PERIOD, THIS SERVICE IS FREE.* You must be a registered customer in order to receive CD replacements.

FOR CD REPLACEMENT

Please send me: ___ CD Replacement

Name _____

Company Name _____

Street Address (No P.O. Boxes, Please)_____

City _____ State _____ Zip/Postal Code _____

Country* _____Daytime Phone _____

Software Purchase Date _____

*This offer limited to U.S., Canada, and Mexico. Outside North America, contact your local Symantec office or distributer.

Briefly describe the problem:_____

_____

CD Replacement Price	$ 10.00
Sales Tax (See Table)	_____
Shipping & Handling	$ 9.95
TOTAL DUE	_____

SALES TAX TABLE: AZ (5%), CA (7.25%), CO (3%), CT (6%), DC (5.75%), FL (6%), GA (4%), IA (5%), IL (6.25%), IN (5%), KS (4.9%), LA (4%), MA (5%), MD (5%), ME (6%), MI (6%), MN (6.5%), MO (4.225%), NC (6%), NJ (6%), NY (4%), OH (5%), OK (4.5%), PA (6%), SC (5%), TN (6%), TX (6.25%), VA (4.5%), WA (6.5%), WI (5%). Please add local sales tax (as well as state sales tax) in AZ, CA, FL, GA, MO, NY, OH, OK, SC, TN, TX, WA, WI.

FORM OF PAYMENT ** (CHECK ONE):

___ Check (Payable to Symantec) Amount Enclosed $ _____ __ Visa __ Mastercard __ American Express

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